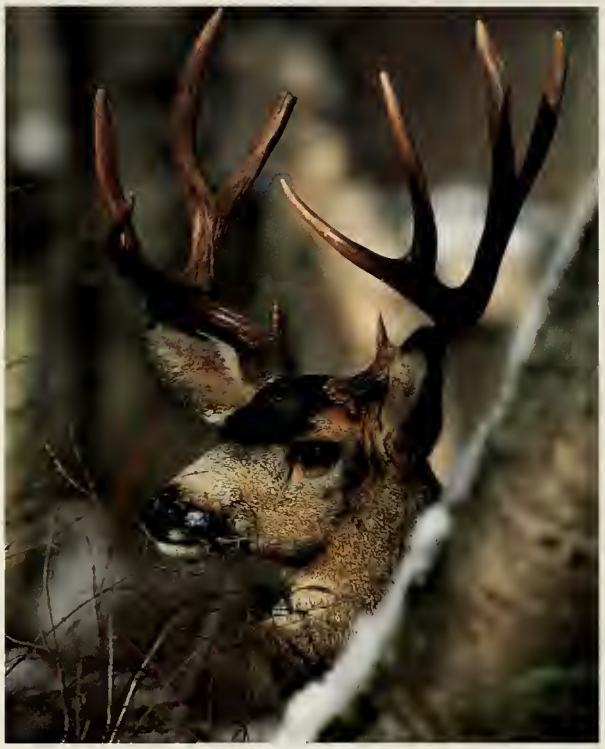
November/December 1996 $2.00

MONTANA OUTDOORS

Our Point of View



MIKE BARLOW

In Idaho, Washington, and Massachusetts, voters are facing ballot initiatives like those passed in Colorado and California—initiatives to limit certain types or methods of hunting. Regulating these traditions is no longer the sole domain of fish and wildlife commissioners and legislators.

While Montanans face no such initiatives this fall, there are challenges that left unmet could undermine the traditions of wildlife management in this state. The battle over allocation of and access to game species has divided sportsmen, outfitters, and landowners in many parts of Montana.

The response of the Private Land/Public Wildlife Advisory Council last year was to recommend a landowner incentive program funded by variable-priced, guaranteed outfitter licenses. This program, approved by the 1995 Montana Legislature, generated more than $2 million the first year. As a result, FWP personnel made an unparalleled effort in one year to nearly double the private land in the program open to public hunting from 3.5 million to more than 6 million acres, and to increase the number of participating landowners from 310 to 750.

It's also important to remember, as Alan Charles points out in his article beginning on page 27, the *real* key to access, the *real* incentive, is the relationships built and maintained by hunters and landowners. No amount of money can substitute for these relationships over time.

We as a society also face the challenge of how we relate to the land. In John Fraley's profile of Bud Moore (page 21), you will gain a perspective of a man who has spent a lifetime learning about the land and man's influence over the land. Moore, who has dedicated a large part of his life to helping others understand sustainability and the role of fire in managing forests, dismisses the title "visionary" saying, "I don't believe I've been ahead of my time. I've just lived long enough to recognize an idea when it reaches its time."

Seldom is something of lasting value created quickly. Wisdom, traditions, and appreciation for the land, and each other, all take time to create.

A society that demands instant results and gratification will tend toward short-term thinking, rarely creating anything of lasting value.

As society becomes more urban, more mobile, and larger, we will find those things of lasting value challenged both from the outside and the inside. Let us resolve to hold onto and build upon the common ground embodied in our traditions and our caring for one another and the land.

Patrick J. Graham, Director
Montana Fish, Wildlife & Parks; 1420 East Sixth Avenue;
P.O. Box 200701; Helena, MT 59620-0701

HARRY ENGELS

A winter visitor to Montana, the northern shrike nests in the boreal forest of the far north (page 8).

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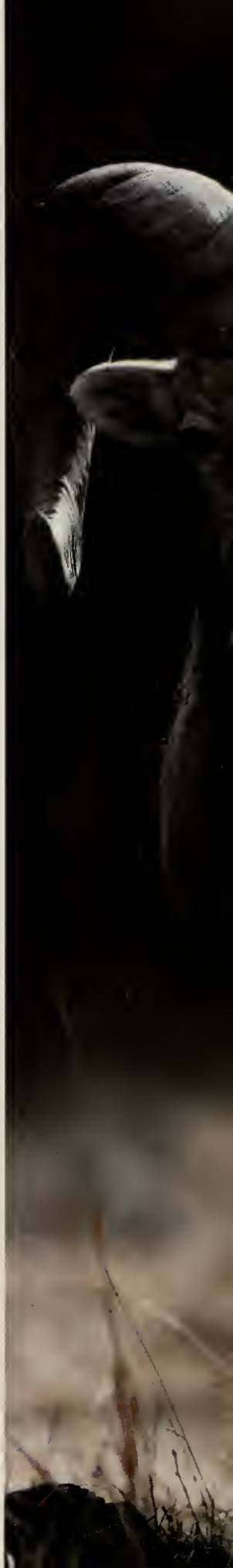
Return of the Bighorns

by Mark G. Sullivan



When an article entitled "Bighorns in the Breaks" was published in *Montana Outdoors* in 1972, the sole bighorn sheep population in the Missouri River Breaks had recently crashed from 90 to 18 animals. The authors, biologists Larry C. Eichhorn and C. Robert Watts, wondered if this herd—which had originated from transplants between 1958 and 1961—could compete with cattle and deer for forage. It looked as if the future of bighorn sheep in the breaks was in jeopardy.

But the story of bighorn sheep in the breaks goes back much further than 1972, all the way to the days when Audubon sheep roamed the badlands of eastern Montana. The Audubon bighorn (*Ovis canadensis auduboni*), a race distinct from the Rocky Mountain bighorn native to the mountains of western Montana, inhabited portions of the northern plains for thousands of years, perhaps since the last ice age. The Mandan Indians, who knew these sheep as *Ar-Sar-ta*, showed their horns to Lewis and Clark when the expedition overwintered at Fort Mandan in 1804-05.

In the spring of 1805, Lewis and Clark recorded their first sighting of bighorns in Montana along the Missouri River, near the present-day town of Culbertson. Farther up the Missouri, near the mouth of the Judith River, Clark noted "great numbers of the bighorned animals, one of which I killed." Audubon bighorns were still abundant in the Missouri River Breaks in the mid-1800s, a fact noted by passengers aboard steamboats traveling up and down the Missouri.

Sadly, this race of sheep, so well adapted to the rugged country and harsh climate of the breaks and badlands, no longer exists. In fact, less than 75 years after Lewis

DAVE BOOKS

Ram bands in the Mickey-Brandon buttes area of the Missouri River Breaks are often found in marginal habitat along the periphery of the buttes.

and Clark's first observations, the race was nearly extinct. The last known Audubon sheep was killed near Seven Blackfoot Creek in the Missouri River Breaks in 1916. Competition with livestock, habitat loss, disease, and unregulated hunting all contributed to their extirpation.

A few decades later, wildlife biologists began planning the reintroduction of bighorns into the breaks. The first transplant took place in 1947, when 16 Rocky Mountain bighorns from Colorado were released near Billy Creek in northern Garfield County. Although this population grew quickly at first, it began to decline in 1956 and by 1963 it had completely disappeared. Competition for forage, disease, cross-breeding with domestic sheep, and social intolerance toward domestic sheep probably led to its demise.

Beginning in 1958 biologists made a second attempt to reestablish bighorns in the breaks. Between 1958 and 1961, 43 Rocky Mountain bighorns were released in the Two Calf Creek area in northern Fergus County. This is the population written about in the May/June 1972 issue of *MO*. Starvation caused by deep snow and an overgrazed winter range apparently caused the die-off of this population.

Meanwhile, other bighorn sheep reintroductions were taking place in northeastern Montana. In 1972, FWP biologists transplanted 41 bighorns to the Little Rocky Mountains south of Malta. In 1980, 28 bighorns were released in the Chimney Bend area of the Missouri River Breaks in northern Fergus County. Another 28 bighorns were released into the Mickey Butte-Brandon Butte area of the Charles M. Russell National Wildlife Refuge in south Phillips County. Each of these bighorn populations survived, although some have been more successful than others.

Current Distribution

Survivors of the Two Calf Creek introduction eventually joined with sheep from the Chimney Bend transplant, and subsequently pioneered the breaks along both sides of the Missouri River (see map). By 1986 this population was estimated at 105 animals. Based on high lamb numbers, Bureau of Land Management biologist Doug Ayers termed it "an expanding, high-quality population."

A hunting season was established for this herd in 1987, and all of the bighorn range north and south of the Missouri River was included in Hunting District 680. In 1996, this hunting district was split into two parts: the north side of the river remained in HD 680, which is managed as part of

FWP's Region 6 (see sidebar), while the south side became HD 482 (managed as part of Region 4). Bighorns are still expanding into new habitat in each of these districts.

In the most recent helicopter survey of this population, 462 sheep (including 84 3/4-curl or greater rams) were observed along both sides of the Missouri River. Because it is difficult to spot sheep during aerial surveys in this rugged terrain, the actual number may exceed 600 animals.

The descendants of bighorns released into the Mickey-Brandon buttes area in 1980 have formed two distinct populations, one in the area around Mickey and Brandon buttes and the other along the south end of the Larb Hills. Both populations lie within Hunting District 622. Since most of these sheep reside on the Charles M. Russell National Wildlife Refuge, FWP and the U.S. Fish and Wildlife Service cooperate in their management.

Because sheep in the Mickey-Brandon buttes area have occupied most of the available habitat, FWP biologists are concerned about adverse impacts on the range as a result of year-long foraging. The best habitat is found on the buttes themselves, and this range is occupied by ewe/lamb bands. Ram bands are generally found in more marginal habitat along the periphery of the buttes.

Sheep in the south Larb Hills are scattered through a series of steep, rugged canyons. The population density is lower than in the Mickey-Brandon buttes area, and these bighorns are still expanding into available habitat. Additional habitat also exists on a series of ridges across Timber Creek, the eastern boundary of this hunting district. Although there have been no confirmed observations of sheep east of Timber Creek, a party of hunters reported seeing sheep in this area in 1994.

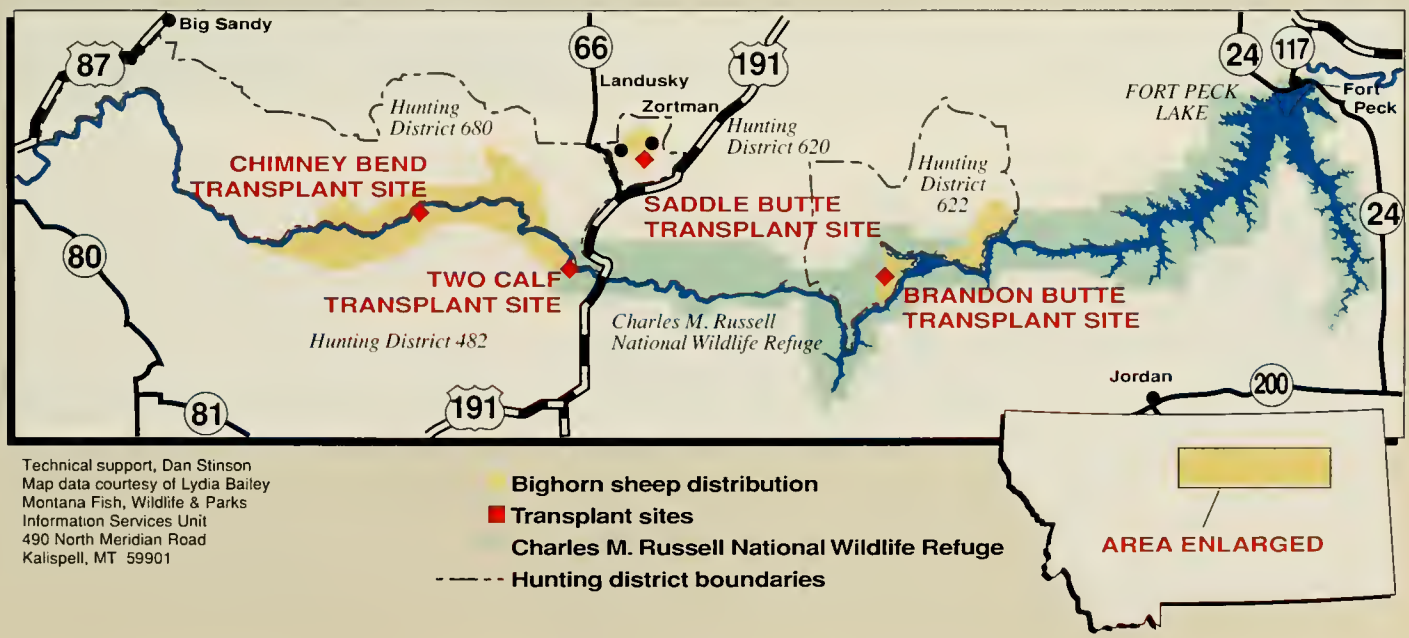
While bighorns in the Mickey/Brandon buttes area are fairly easy to observe, bighorns in the south Larb hills can be difficult to locate. In recent surveys, 146 sheep were counted in this hunting district, but the actual population may be between 165 and 180. Observations by sheep hunters support this estimate.

The bighorn population in the Little Rocky Mountains near Zortman has never expanded beyond the southern edge of this small and isolated mountain range. This herd, which has probably never exceeded 100 animals, is managed as part of HD 620, which encompasses the portion of the Little Rocky Mountains outside the Fort Belknap Indian Reservation.

Since the Little Rockies are more heavily timbered than the breaks, sheep may not be able to efficiently pioneer new habitats in this area. By nature, sheep are creatures of open hillsides and cliffs and are reluctant to venture into heavily wooded areas.

This sheep population has remained fairly constant at 75 to 100 animals. Ram numbers are low and few attain horn growth greater than 1/2-curl. The poor horn growth may be attributable to habitat deficiencies, as evidenced by the fact that 4- to 5-year-old rams in the Little Rockies have thin 1/2- to 3/4-curl horns with small bases, while rams in the breaks typically have 3/4-curl horns by 3 to 4 years of age and much larger horn bases.

PRIMARY BIGHORN SHEEP DISTRIBUTION IN THE MISSOURI RIVER BREAKS AND LITTLE ROCKY MOUNTAINS



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Future Outlook

The greatest threat to bighorn populations in the Missouri River Breaks and Little Rockies is a die-off from pneumonia triggered by a combination of bacterial or viral diseases and lungworm. There are five primary causes of pneumonia in bighorn sheep: (1) bacteria such as *Pasteurella haemolytica* and *P. multocida*; (2) stress resulting from depleted forage or overpopulation; (3) lungworms; (4) viruses; and (5) exposure to a virulent strain of *P. haemolytica* from domestic sheep. With current information, most wildlife veterinarians and biologists recommend bighorn sheep and domestic sheep should not occupy the same ranges or be managed in close proximity to each other.

Bighorn sheep die-offs have occurred in every state in the West. Keith Aune, who heads up FWP's Wildlife Laboratory in Bozeman, notes that more than a thousand bighorns have died in Montana over the last 10 years. In most of these die-offs the disease-weakened sheep die from pneumonia in association with lungworm or some other bacterial or viral disease. High-density bighorn populations appear to be at greatest risk.

Biologists are currently monitoring the health of bighorn populations through use of several techniques. One new method involves picking up bighorn fecal samples to determine the lungworm larvae load. A high load is an indicator of a potential disease outbreak. Other methods for determining health status involve observations of the physical condition of sheep and their habitat on heavily populated ranges.

To better understand the movements and seasonal distribution of sheep in the breaks, future efforts may include radio-tracking of ewes and rams from the various herds. Using this information, biologists can more accurately determine target populations in each hunting district and set priorities for bighorn sheep habitat enhancement projects.

The past quarter-century has witnessed the successful reintroduction of bighorns into the former range of the extinct Audubon sheep in the Missouri River Breaks. With proper management and lack of disease outbreaks, we may see an even greater expansion of bighorns throughout the badlands and isolated mountains of northeastern Montana in the twenty-first century. ■

The descendants of bighorns released in northeastern Montana over the last 25 years are thriving and pioneering new habitats.

DAVE BOOKS

Region 6 Bighorn Sheep Management Plan

DAVE BOOKS

Bighorn sheep in Region 6 (Hunting Districts 680, 622, and 620) are managed to provide healthy and productive populations by working with public and private land managers to protect and enhance bighorn sheep habitat and by regulating harvest. FWP recognizes that the greatest threats to these populations are the loss or degradation of bighorn habitat and disease-related die-offs. The following are some of the plan's objectives and highlights:

• Maintain a buffer strip of at least 10 miles between bighorn sheep habitat and domestic sheep grazing areas.

• Base either-sex license quotas for HD 622 and 680 on the number of 3/4- to full-curl rams in the population and the annual recruitment of younger rams into this age class. Ram populations will be managed to include animals of each age class.

• Base adult ewe license quotas on the number of adult ewes in the population and the recruitment of younger ewes into adult ewe age classes. In addition to providing recreation to hunters, harvesting adult ewes can decrease chances of bighorn sheep die-offs by stabilizing population growth and preventing habitat degradation due to overcrowding. Adult ewes and other bighorns may also be used as transplant stock for introductions in other areas.

• Conduct annual aerial surveys to collect population and distribution data. Periodic ground surveys also provide information on age structure and habitat conditions.

WATCHFUL BUTCHER

Part predator, part songbird, this winter visitor to Montana is one tough bird.

by JERRY KUSTICH

IN OUR HOUSE during winter we have but one steadfast rule: If the temperature is close to zero and snow is blowing sideways at warp speed, we don't go anywhere. But to all rules there are exceptions. The north wind was howling like a high-speed freight train as I left my Twin Bridges home last February for an urgent appointment in Butte. With eyes straining to see the road and white knuckles on the steering wheel, I was barely out of town when I glimpsed a familiar profile sitting on a wire overlooking the bleakest of frozen, windswept fields. My slow speed allowed a safe turnout to a spot from which I could observe the solitary, robin-sized bird sitting hunched and listing into the wind. As I suspected, it was a northern shrike—my favorite winter bird.

From an artistic point of view this made for quite a picture. The impressionistic gray, white, and black of the shrike stood out against a muted white background that faded into the dream-like quality of a Russell Chatham painting. From a scientific point of view the fact that any feathered creature could survive such harsh conditions was truly mystifying. The scene captured the essence of my longtime fascination with this bird. As

DONALD M. JONES

the shrike flew off to another section of wire, I continued on my journey with something a little less foreboding to ponder.

The order Passeriformes is a large group of highly developed birds characterized by three toes pointing forward and one toe pointed to the rear that enable these birds to perch (the passerines are commonly referred to as "perching" birds). Within this group there is a suborder called "oscines" that have developed certain muscles enabling them to sing. These birds are referred to as songbirds.

We are all familiar with the cheerful sounds of the warblers, sparrows, and thrushes, to mention just a few, that brighten our lives with song. The northern shrike is a songbird as well. While fishing in British Columbia late last fall I was drawn from the river by a series of rich tones flowing from the autumn-colored trees. There I found two northern shrikes preparing for their trip south, perhaps to Montana. The song added a pleasant dimension to an already beautiful day.

On late winter days that are not too severe it is possible to hear its liquid, though at times harsh, trills along with the sharp grating calls from which it derives its common family name,

MICHAEL H. FRANCIS

TOM J. ULRICH

The northern shrike (upper photo) is present in Montana only during winter, while the loggerhead shrike (lower photo) is a summer resident. Although the species are similar in appearance, the northern shrike has distinct wavy barring on the breast and a black mask that does not extend above the bill.

"shrike." Also in the shrike's repertoire of sounds are notes that mimic thrashers, jays, and catbirds.

More than 70 members of the shrike family are found worldwide, but only two are native to the Western Hemisphere. The northern shrike (*Lanius excubitor*) occupies boreal regions throughout the Northern Hemisphere. In Europe, this bird is commonly called the great gray shrike. The other species, the loggerhead shrike (*Lanius ludovicianus*), is found exclusively in North America.

Although both species visit Montana, the loggerhead shrike moves into the state from the sonth during our short summer, while the northern shrike comes down from the north during winter. *P.D. Skaar's Montana Bird Distribution* verifies sightings at one time or another of both birds throughout Montana, but indicates it would be rare to observe a loggerhead shrike this far north in the winter.

Although the two shrikes are similar in appearance, the northern, which is a

bit larger than the loggerhead, has a lighter gray back, distinct wavy barring on the breast, and a smaller black mask that does not extend up over the bill. Also, the northern shrike's bill is larger with a pale lower mandible and more hooked than that of the all-black bill of the loggerhead. Females of both species may appear duller or even a bit olive on the back, but they are marked similarly to the males.

IN SHARP CONTRAST to its light-hearted sounds, the shrike has a dark side not possessed by any other songbird. Shrikes are the only songbirds that are truly predatory, a fact reflected in the genus name *Lanius*, meaning "butcher." While jays sometimes eat the eggs of other birds and ravens feast on carrion, shrikes will actually kill rodents and fellow songbirds. Although in summer they prey mainly on grasshoppers, crickets, and other large insects, shrikes rely heavily on small mammals and birds during the rest of the year. After making a kill, the bird often carries its quarry to a safe vantage point and impales the portion not immediately eaten on a thorn, barbed wire fence, or sharp branch for future consumption.

Nature has designed the shrike for its specialized niche in the ecosystem. The bill, with its sharp, hook-like design and pointed notches on each side of the upper mandible (called *tomial teeth*), is similar to that of a falcon's bill. Most of the damage the shrike inflicts on its prey is done with this lethal bill. Although the shrike has strong legs and feet compared with other songbirds, the feet do not have the power to capture prey like those of a hawk or falcon. From its perch a shrike will pounce on an unsuspecting target on the ground, severing the cervical vertebrae with its powerful bill. The victim is then carried away gripped in the bill, or in the case of larger prey, transferred in mid-air to the bird's sharp claws.

No wonder the northern shrike is known throughout its range as the "butcher-bird," or more specifically, since excubitor means sentinel, the "watchful butcher." In the past, negative connotations given to this bird were based on the belief that the shrike would wantonly kill and hang its victims with little other purpose. But studies have shown that the northern shrike is largely an opportunist. It kills its prey when the situation arises, and hanging is merely a function of storage. Nearly everything is eventually eaten.

A few years ago, Lois Jenkins, our inveterate local birdwatcher, came excitedly to my door and placed a brown, fuzzy object in my hand, challenging me to identify it. I thought she had found a pellet regurgitated by a pygmy owl. She then recounted her observation of a northern shrike on a fence post choking up this hairball and dropping it to the ground. When she went over to sift through the grass for the pellet, she found it conveniently

TONY ULRICH

Unlike other songbirds, both the loggerhead shrike (shown here) and northern shrike prey on small rodents and birds, earning them the title "butcher-bird." They often impale their prey on a thorn or barbed-wire fence for future consumption.

sitting on a discarded candy wrapper (even science gets a break now and then). The pellet, of course, contained the undigested hair and bones of the shrike's last meal—one more characteristic this family shares with hawks and owls.

Further observation of the northern shrike's eating habits shows that small insects are gulped immediately when captured. But the bird holds larger insects with its feet while ripping pieces off to eat with the sharp tip of its bill.

Finding enough food is the driving force for most birds. In winter several inhabitants of the far north fly "south" to Montana and other northern states for this reason. Climatic conditions play a huge role in the availability of food, whether it be prey or seeds. From snowy owls and gyrfalcons to tree sparrows and northern shrikes, the search continues southward until a source of food is located.

All cold climate species, predators and prey alike, seem to experience cyclical increases and decreases. Snowy owls and lemmings are a case in point. Periodic declines in lemmings cause these owls—especially the young ones—to search southward. In the harsh northern climate there is little room for error, and survival of young owls depends directly on their ability to find another energy source. The same parallel can be made with the northern shrike. Biologists believe that when vole populations crash in the north, greater numbers of shrikes show up in Montana and neighboring states.

The northern shrike is typically a loner, except when rearing its young. These birds nest in the taiga—a broad subarctic band of coniferous forest that stretches across North America and Europe. Forest edges are preferred, particularly near brushy bogs where good food supplies are typically found. Northern shrikes build bulky, rather untidy nests of loose twigs in spruces or willows. Females lay four to six eggs, which hatch after about three weeks. Both parents then spend another two weeks rearing their offspring until the youngsters are fledged and gradually left to fend for themselves. Immature birds look like the adults, but they show more brown and less gray.

The overall health of the northern shrike population is difficult to assess. More is known about the loggerhead shrike population, which apparently has been declining since the 1970s. As with many songbirds, habitat loss appears to be the primary culprit. Because it nests in remote regions, the northern shrike should be less affected by human encroachment.

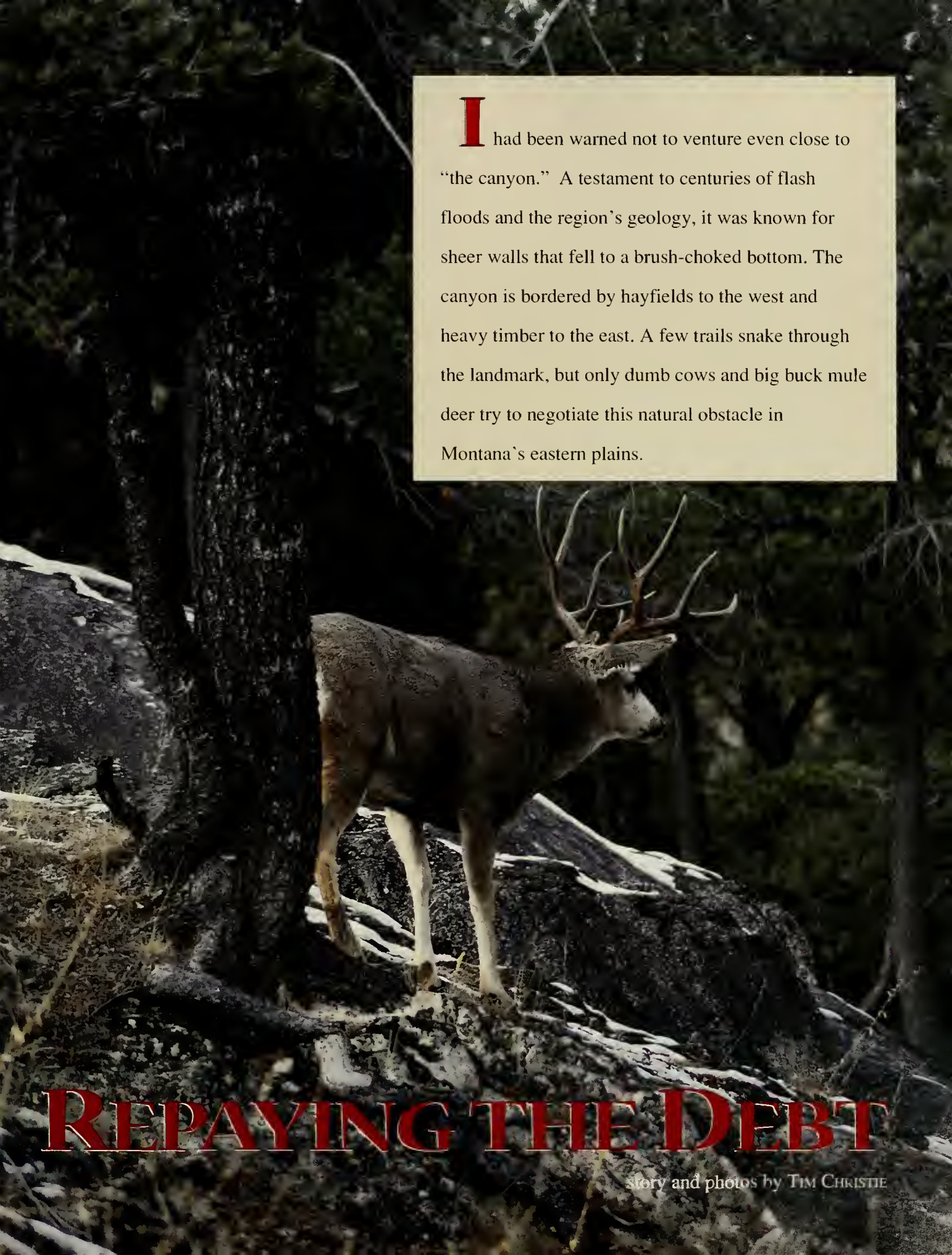
Whether at backyard feeders or in open country, birds that winter in Montana are watchable wonders, for the mystery of surviving the most extreme of climatic conditions is as intriguing as it is puzzling. As it does in the boreal forest, the northern shrike seeks out the edges of Montana's open country when it is here. Its rather large, rounded head distinguishes it while perching, and its undulating flight gives it away as it flies over pastures and fields.

But you may not even have to leave your house to observe one. As the birds scattered from our feeder one January morning last winter, an intimidating shrike briefly landed in our crabapple tree before taking off again. Although this first time "yard bird" was quite a thrill for us, I don't believe the house finches would share that viewpoint.

The watchful butcher, with its black mask and haunting glare, probably deserves its reputation as a neighborhood bully. But nonetheless, it is a survivor; in many ways, the northern shrike is one tough bird. ■

HARRY ENGELS

This northern shrike nest, photographed in Alaska, contains five hungry nestlings. Both parents help in rearing the youngsters until they are fledged.



I had been warned not to venture even close to "the canyon." A testament to centuries of flash floods and the region's geology, it was known for sheer walls that fell to a brush-choked bottom. The canyon is bordered by hayfields to the west and heavy timber to the east. A few trails snake through the landmark, but only dumb cows and big buck mule deer try to negotiate this natural obstacle in Montana's eastern plains.

Repaying the Debt

Story and photos by Tim Christie

Merle Cox (left) and his nephew Tim Christie scan the southeastern Montana countryside for mule deer during a fall of 1995 reunion hunt.

Veteran cowboys with decades of saddle sores earned chasing cows hated the place. Merle Cox, my uncle, had spent his share of time there wrestling cows. He didn't want to go back. In his sage advice was camouflaged a warning. "Sure, there's deer in the canyon. That's where the big bucks hang out, but don't even think of going near there. There isn't a buck alive worth packing out of that hole."

It wasn't disrespectful—well, maybe a little. I'd like to think it was youth, that interlacing of enthusiasm and naiveté that overshadows an elder's wisdom. I didn't intentionally go there. Tracks—big, wide tracks like those of my dream buck—led me there. Soon I stood at the edge of this forbidden place, knowing what Merle would say. Memory tells me I tried to turn back, but the reputation of the place seemed magnetic. Then I spotted the bed of what appeared to be a huge buck. His tracks led along the edge of the canyon, drawing me into a labyrinth of brush and trees. Every movement was measured. Each step was calculated...for this neophyte hunter believed that around the next bull pine would stand a buck as large as the one whose rack decorated Merle's ancient ranch house wall. And if I shot him on this side of the canyon, there wouldn't be a problem getting him out.

Perhaps fate stepped in here. Two bucks jumped from their beds across the canyon. One, the wall-hanger of my dreams; the other, a two-point. Pogo-stick jumping through the timber, the big buck led the way, his wannabe buddy a distant second in their race for survival. Moving down my side of the canyon wall, I peered across the chasm into the shadowed timber. In a brushy opening stood the bucks. The lead buck offered a clear target. With deadly precision I shot. He dropped.

Euphoric over shooting my dream buck, I scrambled down my side of the canyon on my britches, then climbed hand-over-hand up the opposite wall. It was only then I understood why I'd been warned away from this place. Yet, I was certain Merle would find the buck worthy of the effort.

As Merle had taught me, I cautiously approached the downed buck. My euphoria withered when I realized I'd fallen for the oldest trick in the woods, the bait-and-switch. Somewhere in the adrenaline and brush, the big buck had stopped. His over-eager buddy had bolted into the lead, volunteering to fool a neophyte hunter. I had taken the bait. The switch worked.

THE PICKUP RIDE to the canyon was a quiet one, unlike what you'd expect of a celebration of a boy's first buck. Getting out, we stood at the canyon rim and I pointed to the deer's location. He simply said, "Well, let's get to it."

When we reached the buck and finished dressing it, Merle, whose muscular frame had been chiseled through years of hard ranch work, threw the deer over his shoulder and struggled with it every step up the steep canyon wall. Silently, I followed. I clearly remember the look in his eyes when we got to the truck. I'd disobeyed him. Yet, he knew why I'd been there. He's a hunter. He understood. Together we celebrated my first buck.

While only 14 years old at the time, I had spent most of my summers on Merle's ranch. Although I was raised in Butte, my parents wisely understood their children should have a connection with rural life. As a young boy I spent much of my time under Merle's tutelage carrying a .22 rifle and learning the basics of small game hunting. It was only natural that when I was old enough to hunt big game, it would be at the ranch. Since that memorable hunt 33 years ago, I graduated from Eastern Montana College and the University of Montana, then took a job in Idaho.

About the time I moved, coal was discovered on Merle's ranch and a mining company made him an offer he couldn't refuse. They bought the land, leasing it back to him until the big scoop shovel was ready to tear up the earth. He didn't like the deal, but fighting potentially meant having his ranch condemned and taken from him. Maybe it was age, or that his land

wasn't his anymore, but health problems followed.

Merle is now 76 years old and retired, and haying his once-loved alfalfa fields has been replaced by mowing the lawn at his home "in town." Although time and distance have minimized the time we spend together, I try to visit at least once a year. Last summer, Merle and I drove a prairie dog town north of Billings to do some shooting. During that trip he mentioned that he would like to return to the ranch to hunt deer that fall. Part of the ranch had already been mined. The shovel with its voracious appetite to fill America's energy needs was now within eyesight of the ranch house. Our Thanksgiving week foray would perhaps be our last chance to spend time together hunting the land he had toiled a lifetime on and the place where I spent the summers of my youth.

The condition of the ranch house, rattled by constant dynamite blasts from the mine and overtaken by mice, forced us to set up our hunting camp in a Hardin motel. While it lacked the aesthetics of the 100-year-old ranch house, it guaranteed heat and running water. It also meant long days if we were to be afield before daylight in search of Merle's buck. That, of course, was not a problem for Merle; he's always risen early. He woke me the first morning at 3:00 a.m., before the alarm, ready to go. Although he's always been excited about hunting, his eagerness reminded me of my first years of hunting when I had such unbridled enthusiasm for getting up. What a start.

Following our headlights down the black road, Merle said little. What conversation we had centered on where his rifle was sighted in. For years he had used a Winchester Model 94, .30-30. It had served him well. Ten years before leaving the ranch he had bought a lever action Winchester Model 88 in .243 Winchester, to make those long shots on cattle-harassing coyotes. A K4 Weaver topped the rifle. Never one to like scopes, Merle tried the new contraption to see if it would improve his shooting. Deer and coyotes were easier to see in it than they were in iron sights. He kept it. On my summer visit I had taken the .243 home and refinished the stock. A handloader, I also tailored a load that brought out the rifle's best. I sighted it in to shoot three inches high at 100 yards, and assured Merle it would hit where he aimed out to 300 yards.

First light found us at the upper

reaches of a pasture rich with deer hunting history. Years before I had missed a big 4x4 mule deer buck here. I blamed it on a loose scope mount. Merle suspected buck fever. My sister Vickie had shot her first buck in the same pasture. A single, clean shot with the "ol' turdy-turdy" with Merle at her side. Dad had shot a nice 5x5 mule deer buck there. That one took a few more shots than Vickie had needed. The place seemed to rekindle old memories. Today was different, however. We were here to write a new story.

Realizing the limits of Merle's endurance, we drove to a ridgetop, then followed it on foot to the edge of a basin. Sitting, we glassed for deer moving from fields to bedding spots. A doe and fawn fed along a coulee bank. They were legal, but Merle was hoping for a buck. The deer disappeared, never sensing our presence. Although it had frozen hard the previous night, it was warm as we walked back to the truck.

Our midday hunt consisted of Merle setting up on a stand at the head of a draw, while I worked as the driver to move some deer. Nothing! Evening came with us tired but standing watch on the same ridge we had hunted that morning. Again, no bucks. Undaunted, Merle recalled the time when a big four-point buck appeared in the ranch yard the day after I had ended a week-long hunt without shooting a deer. Somehow the story helped to make the long ride back to the motel go faster.

This mule deer, taken last year on the ranch where Merle spent much of his life, held special meaning.

THE NEXT DAY we greeted dawn sitting on a ridge, glassing a wide valley. Through binoculars I spotted a small herd of deer with one buck, a three-point. This was the kind of buck Merle wanted. Unfortunately, they were moving away across the valley. We couldn't intercept them. We continued glassing and spotted another doe. We watched for a buck to join her. It didn't, but seeing all the deer raised our spirits. Now the quest was finding a way of putting Merle in rifle range of one.

Driving to the edge of a coulee bordering some hayfields, we got out of the pickup and slowly walked along a ridge hoping to intercept a buck moving into the timber to bed down. Almost as if it were scripted, standing in chest-high brush in the coulee bottom stood a 4x4 buck and a doe. At the instant I spotted them, the buck saw us. Immediately he began bouncing his way up the opposite side of the coulee. Then, miraculously, he stopped 200 yards away.

Mule deer bucks have an undeserved reputation for being dumb; this one sensed danger, and he was acting on it. But the doe, the primary object of his attention, had opted to stay in the brush. Torn between safety and sex, conflicting instincts had him frozen in indecision, hoping the doe would follow. Good fortune evaporates quickly in deer hunting, and our much needed luck was ready to bounce over the hill.

Merle's hands worked slowly, especially for the moment. Nimble fingers that used to handle a lariat with precision now fumbled with excitement trying to chamber a cartridge. I finally heard the action close and Merle rested the rifle on a rock. Peering into the scope he whispered, "I can't see him, where is he?"

"He's about half way up the canyon, standing in that brush patch," I said. "He's headed uphill, looking back over his shoulder. It's a tough shot. Wait until he steps out."

Squinting into the scope, Merle appeared to be a statue. His skin, leathery and etched with the lines of time, still radiates the bronze color earned working in the sun. "I see him but I don't think I can hit him, Tim," he whispered. "He's too far."

At the moment he spoke, the buck took a step and turned broadside, as if posing for a magazine cover. Lowering my binoculars, I turned to advise Merle where to aim. The .243 exploded. Looking back, I saw the buck collapse. A spine shot had anchored him instantly. Age had not diminished Merle's accuracy with his beloved .243.

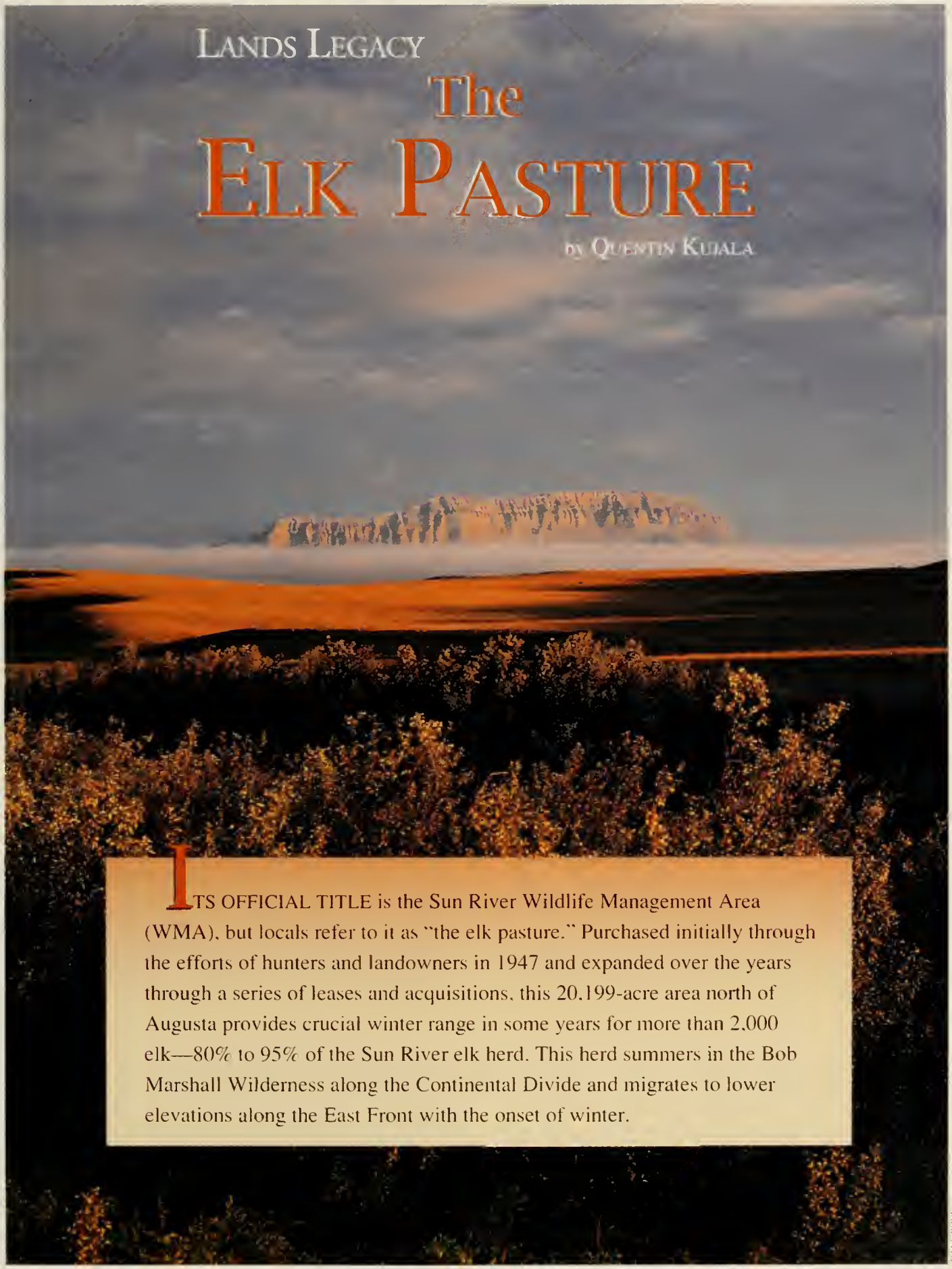
While I gathered my camera equipment to record our success, Merle sat beside the buck, softly rubbing the chocolate-colored tines of its antlers. His eyes revealed the joy of the moment tempered with a solemn respect for what had taken place. While part of why we were hunting was to enjoy the time afield together, deep down we both struggled to hold on tightly to this moment, knowing that such trips to the ranch were about gone. Perhaps it was that wistfulness for what was, and not knowing what will be, that made this buck so special.

Looking up at me, Merle smiled with a rekindled sense of happiness I hadn't seen since he'd left the ranch. Here was the man who had mentored me in the spirit of the hunt and instilled in me a love for the land. In one small way, I hoped, this hunt would begin to repay the debt. ■

LANDS LEGACY

The Elk Pasture

by Quentin Kujala



ITS OFFICIAL TITLE is the Sun River Wildlife Management Area (WMA), but locals refer to it as "the elk pasture." Purchased initially through the efforts of hunters and landowners in 1947 and expanded over the years through a series of leases and acquisitions, this 20,199-acre area north of Augusta provides crucial winter range in some years for more than 2,000 elk—80% to 95% of the Sun River elk herd. This herd summers in the Bob Marshall Wilderness along the Continental Divide and migrates to lower elevations along the East Front with the onset of winter.

DAVE HOOK

DAVE BOOKS

In some years, more than 2,000 elk winter on the Sun River Wildlife Management Area northwest of Augusta.

The landscape of the WMA changes dramatically with elevation, from dry, rolling grasslands along the east boundary to the rugged cliffs of Sawtooth Ridge on the west. In a span of about six miles, the terrain shifts from native bunchgrass prairie at the lower reaches to open limber pine foothills, then to dense Douglas-fir forest, and finally to steep scree slopes—in all, more than 25 habitat types are present. Three perennial streams (Barr, Rose, and Buttolph creeks) meander through the WMA, and numerous springs, seeps, ponds dot the area.

Precipitation on the WMA varies with elevation from about 15 inches to more than 20 inches per year. The area's suitability as winter range is enhanced by another climatic condition—chinook winds. These warm winds, which often exceed 40 mph, periodically loosen winter's grip on the East Front by melting the snow or blowing it away from exposed sites.

The wildlife on the WMA stands as living testimony to the wide array of environmental conditions present. A survey in 1982-83 recorded 32 mammal species, 73 bird species, 2 amphibian species, and 2 reptile species. Not included in this tally were the occasional wolves (a breeding pair was first reported on the WMA by FWP employee Rick Bryant during winter of 1993), grizzly bears, painted turtles (first reported by FWP biologist Kristi DuBois in 1996), antelope, and a few summering bighorn sheep on Sawtooth Ridge. Brook trout, white suckers, and mottled sculpin are also present. Two lakes, Swayze and Dickens, are stocked with rainbow trout to enhance recreational fisheries.

The WMA's management plan calls for maintaining a forage base equivalent to 12,000 elk months (one elk month is the amount of forage necessary to sustain one elk for one month, or roughly 300 pounds of dried forage). If large numbers of elk arrive early in the fall and leave late in the spring, the potential exists for parts of the WMA to be overgrazed, adversely affecting vegetation and wildlife.

To minimize overgrazing and address the concerns of adjacent landowners, antlerless elk permits are issued each year to keep elk numbers in balance with the land. Forage utilization transects are monitored in spring and range surveys are regularly conducted in summer by FWP plant ecologist Bob Harrington. Plant vigor, species composition, and total forage production are all measured.

A December 1 to May 15 closure eliminates disturbance to wintering wildlife. When the WMA reopens on May 15, remaining elk (there may be as many as 500) quickly move to national forest lands high along the Continental Divide. There is an additional road closure until July 1 in the northwestern corner of the WMA to reduce disturbance to grizzly bears.

Two lakes, Swayze (below) and Dickens, are stocked with trout to provide opportunities for anglers. Mule deer (bottom photo) were one of 32 species of mammals recorded on the WMA in a 1982-83 survey.

CRAIG JOURDONNAIS

CRAIG JOURDONNAIS

Recreational use of the Sun River WMA is heavy at times. Antler hunters comb the area when it opens on May 15, anglers eagerly await the third Saturday in May, archery and grouse hunters enjoy September hunts, permit holders scope for antelope and antlerless elk in October, and a host of deer hunters visit the WMA through the end of November. In addition, wildlife watchers, photographers, hikers, horseback riders, and campers visit the area through much of the year. In 1995, 3,637 vehicles were counted on the Sun River WMA.

On December 1 of each year, the gates are locked and migrating elk, some traveling over 30 miles from within the Bob Marshall Wilderness, once again become the primary occupants of the Sun River WMA. Even then the area continues to provide opportunities for wildlife enthusiasts, since elk can be quietly observed from viewing areas along accessible county roads.

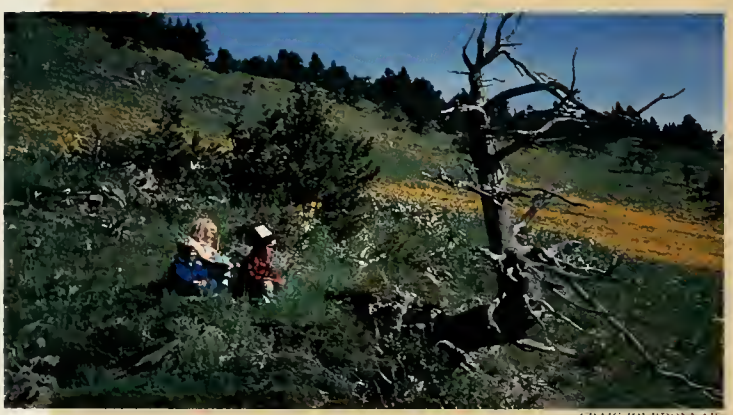
IT IS APPROPRIATE that the seasons, management, and use of the Sun River WMA are so closely linked to elk. In truth, it was the elk and concern for those elk that led to acquisition of the WMA. As Harold and Irene Picton pointed out in an FWP publication entitled *Saga of the Sun*, elk and the Sun River country go hand in hand. Through periods of subsistence hunting, logging, backcountry cattle use, and the 1929 completion of Gibson Dam on the Sun River, the elk adapted as they searched for migration corridors and adequate winter range.

When establishment of the controversial Sun River Game Preserve along the Continental Divide in 1913 allowed the area's elk population to grow unchecked (the herd exceeded 3,000 elk by 1928), winter ranges along the North, South and West forks of the Sun River soon became overgrazed. As a result, large numbers of elk began to winter on private lands east of the national forest boundary. In 1938, C.R. Rathbone of the Circle H Ranch, in the vicinity of the current Sun River WMA, advertised for persons willing to kill depredating elk. Later that winter Rathbone was charged with illegally killing an elk. The case, which ultimately made its way to the Montana Supreme Court, laid the groundwork for today's game damage policies—including the legal precedent that landowners in Montana may expect to receive some damage "...for which there is no recourse." The Montana Fish and Game Department (locally represented by deputy warden Bruce Neal), sportsmen, and landowners began to realize that acquisition of winter range was the only solution.

When land in the area suddenly came up for sale in 1947, the department could not move quickly enough to buy it. State Game Warden Archie O'Claire turned to others for help. Tom Messelt, a Great Falls sportsman, and Carl Malone, a Choteau-area rancher, quickly raised the $10,000 needed to initiate land purchases that would ultimately lead to the present-day Sun River WMA. At last, the elk along the

East Front had a winter range where they were welcome. By 1950, nearly 80% of the wintering elk were utilizing the property then called the Sun River Game Range.

THE ELK PASTURE. The game range. The Sun River WMA. Whatever the name, this property, established and set aside for elk, now provides habitat for a host of wildlife species and a multitude of opportunities for outdoor recreationists. A compromise between early-day sportsmen and beleaguered landowners, the Sun River WMA continues as an example of successful wildlife management in Montana. Best of all, the Sun River elk do indeed have a pasture all their own.



CRAIG JOURDONNAIS

SUN RIVER WILDLIFE MANAGEMENT AREA

Location: In Lewis and Clark County, approximately 9 miles northwest of Augusta. The north edge of the WMA is south of the Sun River as it leaves Sun Canyon.

Size: 20,199 acres.

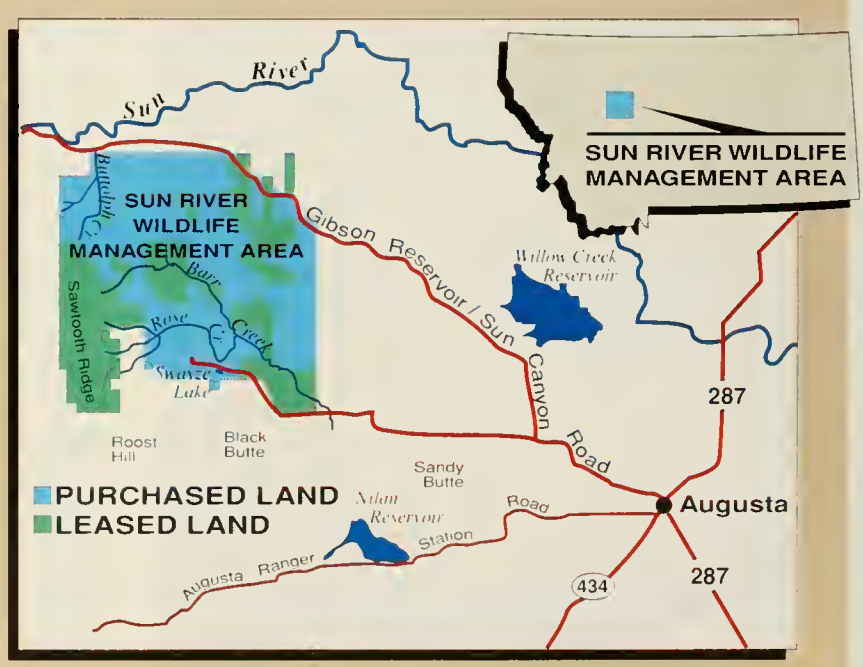
Acquisition Date: The first of nine land purchases was made in 1948. The last purchase was made in 1974.

Access: From Augusta, take the Gibson Reservoir/Sun Canyon Road northwest approximately 3.5 miles. Where the road forks, take the left fork and proceed west 5 miles to the WMA. Vehicles may enter at the southeast corner of the WMA or 2.5 miles farther west at Swayze Lake. The WMA can also be accessed (walk-in only) at several turnoffs along the Gibson Reservoir Road.

Management Goal: To maintain and improve habitat diversity and quality for elk and other species currently utilizing the WMA, and to provide hunting and wildlife viewing opportunities.

Hunting/Fishing Opportunities: Elk hunting during the archery season. Antlerless elk and antelope hunting by permit only. Mule deer, white-tailed deer, black bear, and grouse hunting during archery and general seasons outside the December 1-May 15 closure. Limited waterfowl hunting (duck and Canada goose). Fishing in Barr Creek and Swayze and Dickens lakes.

Wildlife Viewing: A variety of game and nongame bird and animal species may be viewed from May 15 to December 1. Peak times for birding include spring and fall waterfowl migrations. Large numbers of elk can usually be observed from the county road during the winter months.



Hunter, trapper, land manager, author, and visionary, Bud Moore is still learning after nearly eight decades.

by JOHN FRALEY

BUD MOORE began life the same way he has lived it for the past eight decades—out in front. He was the first of nine children in his family, and he surprised his teachers by completing his 8th grade diploma in five years. At age 17, Bud convinced the U.S. Forest Service to hire him. After this early start, a lifetime of training, many high-level federal positions, a stint at the Harvard Business School, and an honorary Doctor of Science degree, Bud imparts a lasting impression of a person who feels he's just beginning to figure it all out.

Bud

PHOTOS BY JOHN FRALEY

PHOTO COURTESY OF BUD MOORE

Bud Moore, pictured at left with trail crew foreman Andy Kuznik in 1936, began his U.S. Forest Service career in the Lochsa River country near the Idaho/Montana border.

Bud was born in 1917 and grew up on a homestead fronting the Bitterroot Mountains near the Montana/Idaho border. He spent his childhood in a "hunter-gatherer" family, growing crops and harvesting deer, elk, and fish. Often, old-time trappers coming and going from what is now the Selway-Bitterroot Wilderness would stop by to stay with his family and inspire him with their stories. He grew to love the mountains and wild country at an early age.

"As soon as I was big enough, at 12, I crossed over a pass into the Lochsa country," says Bud. "I remember getting up high in the South Fork of Lolo Creek and looking down into the Lochsa drainage, all by myself and loving it."

Bud learned to be self-sufficient, and his father demanded to know his whereabouts only under certain circumstances. "He told me that if I was alone, that was fine, he knew I could take care of myself. But if I went with another kid, he wanted to know where I was going. If there were two or more other kids, he wouldn't let me go at all."

Bud's upbringing led him into a lifelong passion for the outdoors, and for grizzly bears, which to him represent wildness. Grizzlies were common in the Bitterroots in the 1920s. "Bears behaved themselves all my boyhood," he says. "We had lots of nighttime interactions with them when they came out of the mountains to reach winter-killed wildlife, but they gave us little real trouble. But the spring bear trappers, and later on sheepherders, began taking a heavy toll. On top of that, in 1927 the Inland Power and Light Company built a dam at Lewiston, Idaho, blocking the spawning salmon that the bears ate on the west side."

After a brief stint as a sheepherder, Bud started with the U. S. Forest Service in 1934 as a firefighter and forest guard in the Lochsa. During the winter, he trapped all over the Lochsa country. "Back then trapping was a big commercial business in the backcountry," he says. "The Forest Service controlled trapping through their cabin permits. At one time I had seven cabins on my trap line; the more cabins you had, the less it cost per cabin."

These wilderness trap lines could be bought and sold like a modern outfitting business. Bud purchased two lines and put them together into one 80-mile line that required five to nine days to work, depending on conditions. Like all the old-time trappers, he was in the business to trap every winter and make a life out of it. He followed two principles. First, he used a rest-rotation system, trapping different areas each winter. Second, the cabins were located in a big loop; he trapped only the area outside the loop to protect the furbearers inside for breeding.

World War II and the Pacific Campaign interrupted Bud's career. He "picked up a little glory," but was glad to get home to fresh water and mountains. He served again with the Forest Service, this time as assistant ranger in the Powell and Missoula districts, and in 1948 became ranger in charge of the Powell District.

Bud had fought fires throughout the early part of his career and he was tapped to serve on a Forest Service task force charged with reducing casualties associated with wildfires like the Mann Gulch fire of 1949, where 13 firefighters were killed. The task force produced, among other recommendations, the standard firefighting orders still in use today.

Bud's ability carried him to increasingly higher positions in the agency, such as deputy supervisor of the Lolo National Forest; training and safety officer at Ogden, Utah; director of Forest Service training in Washington, D.C.; and assistant regional forester for fire and air operations in Missoula. Bud retired from that job in 1974.

"I wanted to get away from the government while I still had some energy," he explains. "I felt that I had moved the agency from fire control to fire management, to recognizing the benefits of fire to the ecosystem, and I felt good about that. Rather than take on a whole new set of objectives, I decided to do something on my own. Working for the government sort of neutralizes you as a person."

Bud did what had always served him well—he returned to the land. He and his wife, Janet, bought 80 acres in the Swan Valley and set out to manage it and live on it. The first thing they did was select a site on which to build their log home. The late writer, Norman Maclean, a good friend of the Moores and a summer resident of nearby Seeley Lake, joined them for a picnic near a small lake on the property.

"We turned around and Norman was gone," recalls Janet. "Then we saw him heading like a homing pigeon to a knoll across the lake. He was poking around the ground with a walking stick. When we caught up with him, he said, 'This is where you'll build your cabin.'"

Bud pointed out that building a home on that raised site would be a logistical nightmare because he planned on building it by himself with limited equipment. Bud voted no on the site, but Maclean and Janet voted yes. It turned out to be a good site in spite of the challenging topography. Bud dug the entire foundation by hand and, with the help of family and friends, built the 2,000-square-foot log home and outbuildings using a gin pole and leverage to handle the logs.

Bud's friendship with Maclean began when Maclean was working on his first book, *A River Runs Through It and Other Stories*. Aware of Bud's reputation as an expert on fire and the Bitterroot Mountains, Maclean asked him to read "USFS 1919: The Ranger, the Cook, and a Hole in the Sky," a story he planned to include in the book. Bud edited the story as he had edited many manuscripts during his years with the Forest Service.

"I gave him the red ink," Bud recalls. "I pointed out that with a number of changes, he could make the story more accurate and still preserve its entertainment value." Bud returned the manuscript to Maclean, then didn't hear from him for weeks. "He finally called me, angry that I had given him such a hard time on the story. He said to me, 'Remember, Bud, *I'm* the professor.'"

Maclean and the Moores became close friends. "I always believed that Norman viewed Bud as living the life he would have led himself, had he not ended up as an English professor at the University of Chicago," says Janet.

Later, Maclean asked Bud to review *Young Men and Fire*, the story of the Mann Gulch tragedy. Again Bud was hard on Maclean's manuscript. "I advised him to reduce the details on fire modeling and other technical stuff in the book, to make it flow better."

In the book, Maclean acknowledges Bud's help, calling him "the old-timer in the Forest Service I feel closest to." As he began the daunting task of writing *Young Men and Fire*, Maclean turned to Bud for counsel. "This feeling," wrote Maclean, "...is a feeling that you will be ready to write if first you can find the right friend to listen to your opening paragraph. I drove the thirty five miles to Bud's."

Before they talked, Maclean dug out a bottle of "Ancient Age" from the trunk of his car, noting that when mixed

PHOTO COURTESY OF BUD MOORE

Having served in many capacities with the Forest Service over a 30-year span, Bud completed his career in 1974 in Missoula as assistant regional forester for fire and air operations.

with spring water, the water is "just as good as the whiskey."

"Afterwards," wrote Maclean, "I went back to my cabin to write on the effects the tragedy of the Mann Gulch fire had on the know-how of firefighters. What I wrote comes next, and Bud Moore was the first to check it."

BUD'S LOVE OF THE LAND has led him to apply principles he'd learned during his long career in a new way on his Swan Valley tract: In doing so, he might be considered one of the unheralded fathers of ecosystem management. He says that by 1980 he pulled together most of the concepts now classified under ecosystem management and has employed them on his land for several decades.

"Ecosystem management is billed as new stuff," he says, "but the Forest Service old-timers I learned under were pretty close to it. I'm not sure they understood it in modern terms, but they were close to the land and understood the connections."

Bud practices his view of ecosystem management, which he describes simply as "keeping all the parts," on his tract nestled between the Mission and Swan mountain ranges near Condon, and another 167 acres near Ovando. The centerpiece of Bud's management area is a small family-operated sawmill. "We run a light-on-the-land logging show," he says. About half the logs for the sawmill come from Bud's land, and the other half from neighbors' land.

"For sustainability, we have to have some income from the land," he says. You'd need to be sitting on a pile of money to be able to just own land without working it."

Bud says that on their land he demonstrates sustained yield and an even flow of timber on a mini-scale. "We grow a lot of timber and provide a lot of wildlife habitat at the same time," he says. "It seems to be working. For example, last year I watched a grizzly sow and two cubs feeding on bearberry for about an hour near the edge of our property." He manages his area as a wildlife-friendly corridor for movement of species like the grizzly between the Missions and the Swans.

Bud leaves a portion of his land untouched. "You don't have to have wilderness to have wild places," he says. "You can have little pieces of wilderness even around your home." In this wild area Bud and Janet have seen elk, moose, mountain lion, and bear. "We have everything on our land that ever existed in the Swan Valley, as far as we know. And we're going to keep it that way."

Larger land managers could benefit by practicing these principles on their land, Bud says. "One of the big problems in larger ownerships is the pace—so much from the land in a short time. You need an even flow of products, and you need to avoid hitting drainages too hard. It's a matter of volume and pace more than the type of practices."

Bud has helped forge a coalition of varied interests in the Swan Valley to work for responsible forest stewardship, especially since a timber shortfall has become obvious. He has been a major player in the Swan Citizens Ad Hoc Group. His purpose there has been to join all the interests in the valley to make the transition to an economy that depends less on timber. "We have something good to work with in this valley," he says. "I won't spend any of my energy or money on actions that will further polarize our communities."

Bud notes that he recently quit the Communities for a Great Northwest and the Montana Wilderness Association when they took part in activities he believed were divisive. "Every once in a while someone has to lay down in front of a bulldozer or confront an environmentalist, but that's not the wave of the future. Civil wars between special interest groups won't help people, land productivity, or communities. We have to learn to reason together."

ANOTHER FACET OF BUD'S return to the land was his return to his old love of trapping. Beginning in 1975, he established trap lines in the Missions and the Swans, including several wilderness lines. "The main thing that drew me back to trapping was not trapping itself," he says. "Furbearers and predators do not have a strong public constituency; trappers are most knowledgeable about their habitat needs. To be credible with trappers, one has to trap. So to help trappers organize in support of their resource is the main reason I returned to trapping."

Bud wanted to get an idea of the ability of the land in the Swan to produce furbearers. "There's a few things that aren't coming back—wild things, barometers," he says. "It's just a feeling I have; I guess you have to live a long time to see things clearly. We're good on short-time history but not as good on long-term."

Bud has applied his model of testing and demonstrating principles through on-the-ground applications. "You've got to think like a coyote to trap a coyote," he says. He notes that in the mid-1970s, a series of drainages in the Missions and Swans produced about 40 marten per year in a sustained yield flow; now, those same drainages could produce only about 20 marten, using the same careful trapping methods. He attributes this decline to home building and timber harvest practices outside the wilderness that did not consider habitat linkages needed by furbearers and other members of their food chain.

Another motivation for Bud to return to trapping was his desire to improve trapping practices. He and Janet worked with other trapping enthusiasts to form the Montana Trappers Association. "I felt that cleaning up the trapper's act was job number one if we wanted our trapping heritage to continue," he says. Janet became a lobbyist for the newly formed association, and they both promoted legislation to establish a trapper education course. Later, when the course gained approval, Bud worked on the lesson plans and helped train the first instructors.

Bud says that Janet did most of the organizing and paperwork for the organization, while he served as kind of a senior advisor. "I figured when I left the Forest Service, I left all that administrative mishmash behind me. I didn't want that to drain time away from what I wanted to do on the land.

"I wanted to keep the old style of trapping alive," he continues. "I wanted my fellow trappers to know there's another way to trap without snowmobiling right up to the set."

Bud originated and promoted "no-trace trapping." He believes that trappers were instrumental in developing the wilderness ethic and should continue to experi-

PHOTO COURTESY OF BUD MOORE

An accomplished wilderness traveler, Bud returned to his old love of backcountry trapping in 1975.

"There was all kinds of speculation on what might have happened to me, but I was warm and active, piling up fur and enjoying myself to no end."

ence that heritage as an example to others. Always a doer, Bud organized an expedition to promote and demonstrate his ideas. "I made a vow that I wouldn't speak out on anything unless I really knew the country and lived it," he says.

True to his word, Bud spent several months trapping marten, wolverine, and lynx in the Bob Marshall Wilderness during the winter of 1983-84. He received an exemption from the U.S. Forest Service to maintain two small tents as a base camp in the Little Salmon Drainage from which he established trapping "spur lines." During summer, Bud scouted the area and in October he crossed over the Swan Range and established the camp; the heavy gear was brought in by a packer. Bud returned to the camp Thanksgiving Day to prepare for the December-January trapping season. On arriving at camp, he went hunting for mule deer but was "foiled by a mountain lion." The next day on a ridge high above the lonely camp, he killed a mule deer buck for his winter meat supply. "It's a long way to the butcher shop when you're back there," he explains.

Later, in an article for *The Trapper*, Bud described dressing out the deer. "Daylight was fading with darkness near at hand. Working there in the snow, I was the only human in that natural universe." In the article, which focused on no-trace trapping in wilderness, Bud described how he used "peg sets," a light-on-the-land technique to catch marten. He caught 64 that winter.

Bud's trip attracted a lot of attention from Swan Valley residents and others, who found it unusual that a man pushing 70 could handle such a strenuous adventure. "If I'd known everyone would get so stirred up I might not even have gone in," he says. "There was all kinds of speculation on what might have happened to me, but I was warm and active, piling up fur and enjoying myself to no end."

The media also learned of Bud's trip. Several people from the *Missoulian* decided to snowshoe into Bud's wilderness camp and cover his story. The time came and passed when the newspaper crew was supposed to arrive at his camp.

"One day I was heading through the snow up the spur line to Lion Pass along the Swan Range," recalls Bud, "and I saw something red up there; I couldn't believe my eyes." Bud found attached to a tree near one of his marten sets a small stuff sack with a few items for him, including a "nice bundle of first aid supplies" and two or three big, chewy fruit bars. "That was great; I sat down and ate a fruit bar right on the spot," he recalls.

Bud learned from a note the crew left that it had taken them three days just to cross the Swan Range and to reach the closest marten set, and that they were probably overloaded with gear. "They reasoned that if they wallowed all the way down to my camp and then had to make it all the way back out, they'd be long overdue."

Bud sent the *Missoulian* a note thanking them for making the effort to cover his expedition, and for bringing the fruit bars. "They did run a nice picture of Lion Creek Pass," he recalls.

After resting the area for a year, Bud again trapped the upper Little Salmon drainage in the wilderness complex. During the winter of 1985-86, he made six or seven loops along his trap line, starting and ending the 60-mile treks in the Swan Valley. "I crossed the Swan Range twice a week that winter," he recalls. "It's a pretty hard lift over those ridges." A number of people wanted to go with him that winter, because he was coming out so often. A series of physically fit, mostly young men accompanied Bud to help him carry the load and to learn his no-trace trapping techniques.

"Bud made national news on those trips," recalls Janet. "NBC, ABC crews, all of them wanted to come out and go in there to cover him, but they couldn't find any reporters who were tough enough to carry their equipment and still make it."

Bud steadfastly refuses to talk about his superior condition and talent for wilderness travel. "Humility is so important in wilderness," he says. "If you make a few mistakes by overestimating your ability you can end up a corpse. You need to remember that you can always cross that pass the next day. I always wanted to make sure I got out to sell my furs."

IN HIS NEWLY released book, *The Lochsa Story*, Bud traces the history of humankind's relationship to the Lochsa country and draws from it lessons of land management that could be applied anywhere. "This is Bud's magnum opus," says Dan Greer, the book's editor.

In the book, Bud takes a new look at conservation and multiple use. He points out the flaws in viewing forests simply as producers of commodities. "Protecting or enhancing the factors that keep the land whole deserves first priority in management," he writes. "A variety of ways to use the land and its values, without detracting from management's first priority of wholeness, will surface in turn." Based on experience, Bud suggests ways in which management could be strengthened within the Forest Service, including more listening to people who live on and know the land.

In the final chapter, Bud laments some of the poor land use decisions made in the Lochsa, and illustrates how practicing whole-land management, or "keeping all the parts," will be necessary to conserve forest resources in a sustainable manner. He closes by talking about his personal connection to the land, "the land's great spirit of place," forged over eight decades of living with it inside him.

"The land oozed life," he writes, describing his view from a mountaintop. "I suppressed an urge to hike out along the ridge and beyond, into the depths of a new frontier. To do that takes more than one lifetime."

In Bud's lifetime, he's been recognized as a visionary, but he dismisses that description. "I don't believe I've been ahead of my time," he says. "I've just lived long enough to recognize an idea when it reaches its time." ■

Accentuating the Positive

Hunters may not realize it, but their activities can affect a landowner's bottom line. How does your behavior stack up?

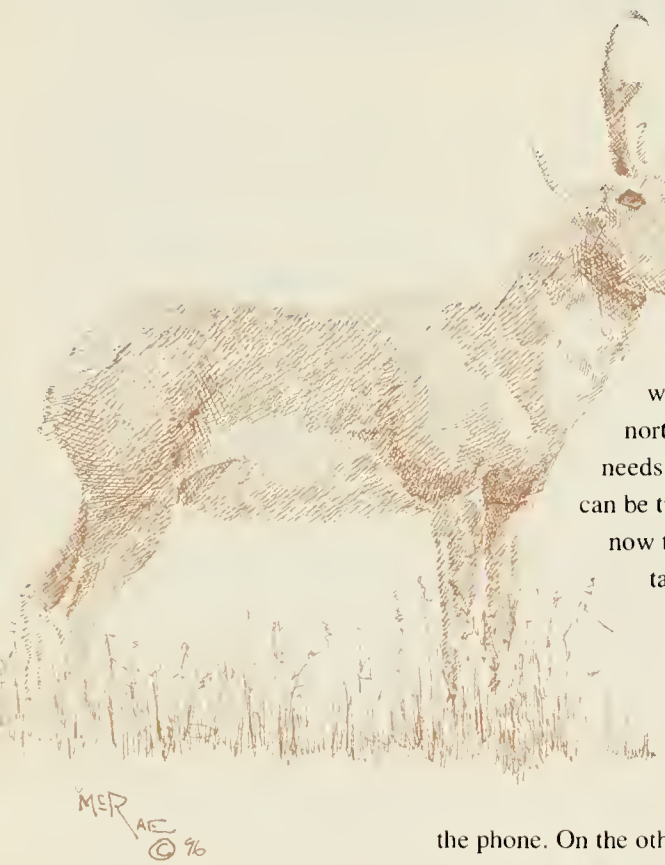
story by ALAN CHARLES, illustrations by CLINT MCRAE

THE EVENING WEATHER REPORT has just begun when the phone rings. "That makes the seventh call since I got in from the pasture," Luther Johnson mutters as he gets up out of the easy chair. Those calls, plus the three he got early this morning, and the four carloads of strangers that stopped during the day, remind him that big game season is underway.

Of course, he doesn't need the calls or visits to remind him of that. Ruts ripped in the windmill pasture road confirm that opening day fell on a wet weekend this year. And this afternoon, after trying three times to push a herd of heifers through a gate, he rode up and found they were spooking from a fresh gutpile in the middle of the road—yup, it's pretty obvious the city folks have come to the country.

Luther doesn't mind the hunters. In fact, he enjoys visiting with them, especially the ones that come back year after year and those that enjoy getting out and really hunting instead of just riding around in their vehicles.

It's just that at this time of year he's got other things on his mind. First thing tomorrow morning the truckers are due in to ship calves. And yesterday afternoon, the neighbor called to say one of Luther's bulls had come visiting. On the way over to retrieve it, he'd broken an axle on the stock trailer, so the bull was still penned in the neighbor's corral. And somehow he's got to finish getting the bales off the bottom where he plans to pasture the weaned cows. And the north pasture fence still needs riding before stock can be turned out there. And now the weatherman is talking snow, and of course the truckers won't be able to get in if the road muds up, and....



One more ring, and Luther picks up the phone. On the other end, a young man's voice enthusiastically proclaims there might be tracking snow come morning and wonders if he and his buddies might come out to hunt deer....

HUNTER IMPACT—that is the basis of the new hunter access component of FWP's Block Management Program called the Hunter Enhancement Program (HEP). Actually, hunter impact has been a main driving force behind the popular Block Management Program that has opened millions of acres of private land to public hunting during past seasons.

HEP was authorized by language in House Bill 195 that stated "...benefits will be provided to offset potential impacts associated with public hunting access, including but not limited to those associated with general ranch maintenance, conservation efforts, weed control, fire protection, liability insurance, roads, fences, and parking areas." In considering HEP as part of the overall Block Management Program, a committee charged with developing a system of compensation guidelines included "time spent dealing with hunters" as one of those potential impacts for which a landowner might be compensated.

Does public hunting impact the private landowner? The simple answer to that is "yes." But understanding *how* hunting affects landowners is more complex, and differs according to each situation. Certainly, understanding how our hunting activities might impact a landowner can help us, as sportsmen and women, capitalize on the positive impacts and minimize the negative impacts.

Not all hunter impacts are negative. Throughout the process of developing guidelines for a hunter access program, first through the efforts of the original Private Land/Public Wildlife Advisory Council and associated regional councils, and then through the Incentives Advisory Council, I heard people say, "Gee, the ideas are good, but 'hunter impact' sounds so negative. Can't you call it something else?"

Perhaps that is what we have done for too long. We have failed to acknowledge that our hunting activities do carry impacts—that even if we ourselves are not the ones who leave gates open, who start prairie fires, or scatter noxious weeds, that we, collectively, affect a landowner through our presence.

It is hard for us to see, or to measure, the impact we have as individual hunters because we see only the one or two weekends we call and ask permission; we see

only the four or eight hours we spend on a landowner's property, and to us, that little bit of time doesn't carry much impact.

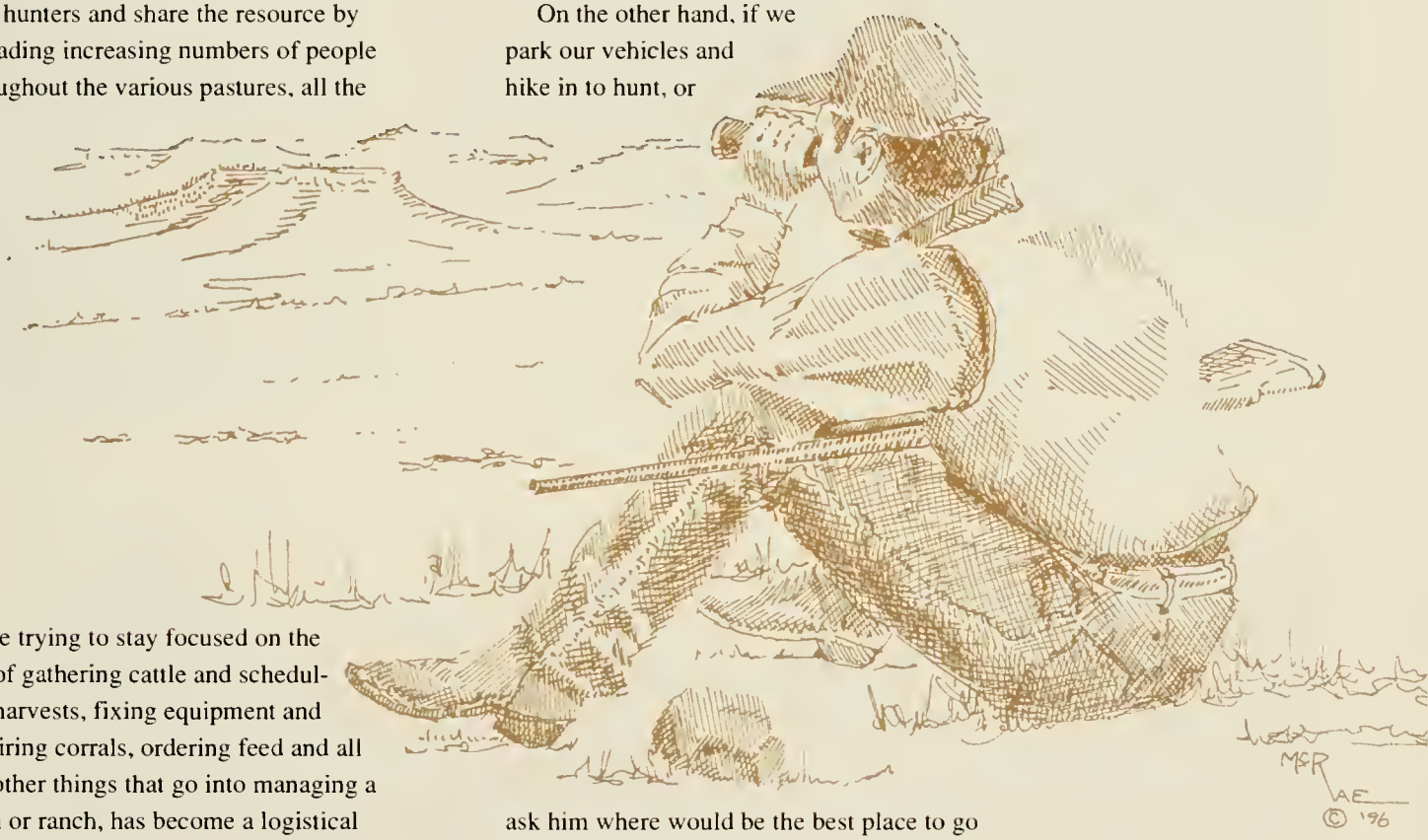
We don't sit in a landowner's living room during his busiest time of year—the time that might well spell success or failure for the entire year's work, when crops are being harvested and calves sold—trying to relax after a busy day's work, only to have the phone ring time and again as hunters call for permission.

It is hard for us to measure impact because we are just the one party, and we know only our own actions. Yet, for many landowners, the job of trying to accommodate hunters and share the resource by spreading increasing numbers of people throughout the various pastures, all the while trying to stay focused on the job of gathering cattle and scheduling harvests, fixing equipment and repairing corrals, ordering feed and all the other things that go into managing a farm or ranch, has become a logistical nightmare.

So, what can we as individual hunters do? Certainly, when asking permission we can try to ask well ahead of the time we plan to hunt to make it easier for the landowner to schedule hunters. We can avoid calling late at night or early in the morning, or simply dropping by at the last minute. And if we do stop by and find the landowner busy, instead of expecting him to stop what he's doing to accommodate us, maybe we ought to leave and try somewhere else, or plan to come back another time.

We obviously cannot always time our hunts when roads are dry and dusty. Autumn is a time of moisture, and rain or snow often makes for better hunting. But we need to consider that if we four-wheel our way back into a pasture, tearing ruts in the road, we've left those ruts for the rancher to fight the rest of the year. The wear and tear on his equipment, and his humor, might well influence his attitude toward allowing hunters to recreate on his land in future years.

On the other hand, if we park our vehicles and hike in to hunt, or ask him where would be the best place to go if the roads are muddy, then by our awareness we may create one of those positive hunter impacts that can open more gates.



I doubt very much if a sportsman has ever knowingly, intentionally, spread noxious weeds. Weeds are an insidious presence, and they are spread in many ways. Seeds catch in the mud stuck in tire treads, and adhere to the undercarriages of vehicles. They gather in pants cuffs, stick to fleece backpacks, and imbed in the hair of

bird dogs. And they travel with the hunter, usually without his or her knowledge.

Weeds present an expensive threat to landowners. They can turn a high-dollar grain crop into a financial disaster, and they can greatly reduce the carrying capacity of a pasture. Weeds are a constant concern for any good steward of the land, and hunters, through the very nature of their activities, present a risk of spreading them.

How can we reduce that risk? Obviously, a landowner who has never met us cannot know what sort of risk we present. But if we show an awareness of the problem, if we take time to carefully wash our vehicles after being out "in the boonies," if we curry the dog and pick out the weed seeds that stick in our clothing, then we can at least reduce the chance of unwittingly creating a negative hunter impact.

Are all hunter activities negative impacts? Of course not. Many landowners enjoy the opportunity to visit with hunters during the fall. By helping trim big game herds, hunters help reduce the impact those animals have on the landowner's operation. Many landowners are hunters themselves, something we often forget when we discuss landowner/sportsman relations.

But we hunters must recognize that our activities impact the landowner in a collective sense. While we might only make one call on a Friday night, remember that the landowner might have already received 20 other calls. While we might make only one set of ruts in a pasture trail, 10 other trucks might follow those tracks.

So, as we go afield this fall, perhaps we should make a special effort to recognize the impacts our hunting activities might have on the private landowner. The new Hunting Enhancement Program provides benefits to landowners to offset potential impacts. But it doesn't make the negative impacts go away. Only we, the sportsmen and women who hunt on private lands, can turn negative impacts into the kind of positive impacts that will make private landowners welcome us onto their lands. ■

FWP COMMISSION WINS WAFWA AWARD

Montana's Fish, Wildlife & Parks Commission has been honored as the recipient of the 1996 Commission of the Year Award from the Western Association of Fish and Wildlife Agencies. The Commission was selected from among the policy-setting bodies of fish and wildlife agencies in 13 western states and Canadian provinces at WAFWA's annual conference in Hawaii last summer. This is the first time Montana's Commission has been so honored.

In his nominating letter, FWP Director Patrick J. Graham recognized the involvement of Montana's commissioners in a number of issues that have placed Montana's Commission at the forefront of fish and wildlife decision-making in the nation. In particular, their involvement with important habitat acquisitions, management of large predatory animals, public access issues, and whirling disease, Graham noted, "...have contributed significantly to the effective management, long-term protection and enhancement of Montana's renowned fish and wildlife resources and the state's outdoor recreational opportunities. These are assets that are shared not only by the residents of Montana, but also by the estimated 7 million visitors to this state from across the nation and around the world each year."

In a letter supporting Graham's nomination, Montana Governor Marc Racicot praised Montana's commissioners: "They have done what they believed to be in the best interest of the people and the resources of Montana. I have consistently been impressed with their steadfast refusal to bend to the pressures of special interests. They seem to have an uncanny knack of appreciating the other side of an issue." Racicot further noted that "[the Commission's] work in implementing the recommendations of a Private Lands/Public Wildlife Council that I formed has resulted in significant benefit to the State."

MIKE GURNETT

The Montana Fish, Wildlife & Parks Commission (left to right): Dale Tash, Darlyne Dascher, Dave Simpson, Charles Decker, and Stan Meyer.

Governor Racicot personally congratulated the commissioners for earning the award at the Commission's meeting in Helena on August 9. Members of the present Commission earning the award are: Stan Meyer, chairman, Great Falls; Dave Simpson, vice-chairman, Hardin; Darlyne Dascher, Fort Peck; Charles Decker, Libby, and Dale Tash, Dillon.

OUTDOOR REPORT BROADCAST SCHEDULE

FWP's weekly video news program, called the "Outdoor Report," airs on all Montana television stations during their evening newscasts. The broadcast schedule for these two-minute productions is as follows:

LOCATION/STATION	DAY/NEWSCAST TIME
Billings:	
KTVQ-TV (CBS)	Friday/10:00 p.m.
KULR-TV (NBC)	Thursday/Friday 5:30 & 10:00 p.m.
Great Falls:	
KFBB-TV (ABC)	Thursday 5:30 p.m.
KRTV-TV (CBS)	Thursday 5:30 p.m. Sun/10:00 p.m.
Missoula/Kalispell:	
KECI-TV (NBC)	Wednesday/6:00 & 10:00 p.m.
KPAX-TV (CBS)	Thursday/10:00 p.m.
Butte-Bozeman:	
KXLF-TV (CBS)	Friday/10:00 p.m.
Helena:	
KTVH-TV (NBC)	Thursday/5:30 & 10:00 p.m.
Miles City:	
KYUS-TV (FOX)	Friday/5:00 & 10:00 p.m.

A STORY OF POSSIBILITY

by Mike Gurnett
Film Production Supervisor
Conservation Education Division

Livestock grazing on public land is an easy topic to voice an opinion on and then quickly walk away. The difficulty comes in listening to and attempting to understand someone else's point of view. Grazing discussions usually switch from objectively addressing a land use to subjectively attacking or defending a lifestyle in a hurry. Some views are based on how things were done, good and bad, a century ago or a hundred miles away. Almost always, constructive discussion is bogged down in a world of stereotyping others.

A group called the Livestock/Big Game Coordinating Committee, made up of public and private land managers, livestock operators, and wildlife biologists, had been working to find common ground regarding livestock grazing and wildlife management on public lands in the West. They were making progress and approached Montana Fish, Wildlife & Parks (FWP) with the idea of making a video. FWP agreed it was something that needed doing. But in the beginning we didn't fully realize how difficult it would be to find the words and pictures needed to even suggest common ground between livestock grazing and wildlife management on public lands.

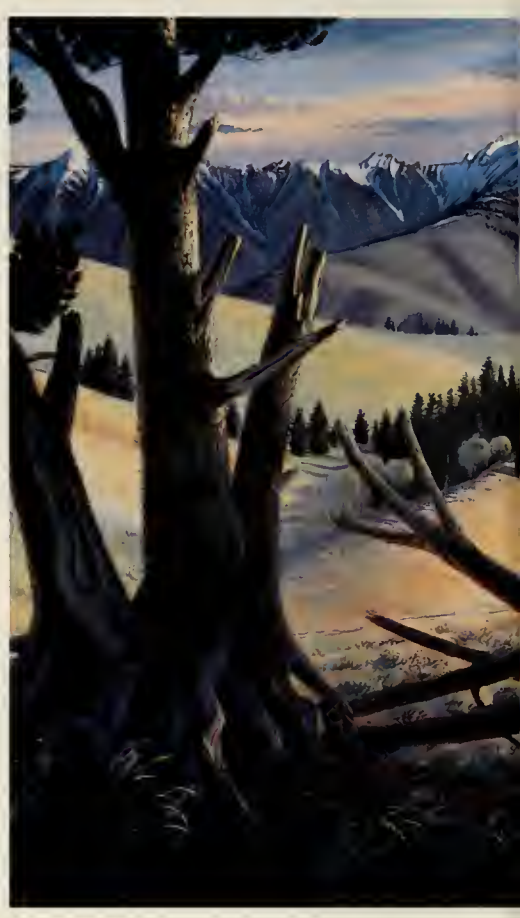
We got an inkling when the phone began to ring, however. We were told by special interest groups that attempting to produce a documentary about such a controversial issue was absurd, and that the project would not survive to completion. Some people had an opinion about what we were doing before we had really done anything.

Despite the warnings, we forged ahead. In addition to our involvement, the committee acquired the services of free-lance script writer Marshall Riggan. We began by discussing grazing with ranchers, conservationists, biologist, and foresters. We found that people on the front lines of the controversy often use the same data and case studies to reach opposing conclusions. It didn't take long to find out there is a lot more to the grazing issue than cows and elk eating grass.

Whether or not we live in the West, most of us can close our eyes and see what we want the West to be. Our personal snapshot may be from a place we once visited, a Hollywood backdrop, or the work of an advertising agency. The production plan was to use the cowboy art of Charles M. Russell to symbolize the opinions of those who feel there are no problems with public land grazing, and the pristine landscape images of Albert Bierstadt and Thomas Moran to portray the beliefs of those who want livestock grazing on public lands abolished. While the images of these artists are endlessly appealing, we intended to show how both perceptions have been swept away by the passing of time. Through the neutral nature of art, we hoped the listening would begin.

To complete our approach, we needed someone to create a new painting of the West. An image that would reflect what the committee was trying to accomplish through cooperation. A new vision for people across the country to close their eyes and see. We needed an artist capable of combining the romance of Bierstadt and Russell while capturing the reality of today's land uses and our way of life. We found just the right person in contemporary artist Larry Zabel of McAllister, Montana. Larry has spent years attempting to capture the fundamental reality of the West. He agreed to allow us to document his search for a new vision of the Montana landscape.

In the past, livestock grazing has been debated in an arena where if one side wins, someone else must lose. In the making of the documentary, no member of the Livestock/Big Game Coordinating Committee ended up with just what he wanted. For that, they may be individually criticized by some of their peers. What they patiently, and sometimes painfully, ended up with is contained in the 28 minutes of "Landscape."



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The committee members agreed that times are changing, and though we can learn from the past, we should stop living in it. They also agreed that we have a common problem: the rapid loss of the open space that is mutually essential to our lives. That in Montana, most everything is tied to the land; and if we take care of the land, there can be common ground where livestock and wildlife coexist. That we have better things to do than argue.

MIKE GURNETT

"Common Ground" (above) by Larry Zabel combines the images captured in the documentary, "Landscape." Zabel at work (left) in his McAllister studio. Painting provided courtesy of Zabel Publishing © 1996.

The Livestock/Big Game Coordinating Committee

USDA Forest Service: *Bruce Fox*
USDI Bureau of Land Management: *John Moorhouse*
Montana Stockgrowers, Montana Association of Grazing Districts and Montana Public Lands Council: *Knute Hereim* (deceased), *Jim Peterson, David Voldseth,* and *Jason Campbell*
Montana Woolgrowers Association: *John Baucus*
Montana Wildlife Federation: *Jim Richard*
Rocky Mountain Elk Foundation: *Lance Schelvan* and *Ron Marcoux*
Montana Fish, Wildlife & Parks: *John Mundinger, Steve Knapp,* and *Ron Aasheim.*

1996 Index

The major items published in Montana Outdoors in 1996 are indexed below. Extra copies of '96 issues (except January/February and March/April) are available at $3 each (includes postage). The following back issues are available at the same price:

1971—all issues, except March/April
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1975—all issues
1976—all issues
1977—all issues, including Special Yellowstone Issue
1978—all issue, including Special Parks Issue
1979—all issues
1980—all issues, including Special Hunting Issue
1981—1994 all issues
1995—all issues

To inquire about or order a back issue, write: Back Issues, Montana Outdoors, Montana Fish, Wildlife & Parks, 930 West Custer Avenue, Helena, MT 59620.

FISH/FISHING/WATER

From the Field—Fluvial Arctic Grayling Poised for Recovery— Catch-and-release regulations and water conservation efforts have improved the outlook for Big Hole River grayling populations (Patrick A. Byorth, March/April).

Managing Montana's Paddlefish: New Approaches—Thanks to careful monitoring and a controlled harvest, Montana's paddlefish stocks are thriving (Dennis Scarnecchia and Phil Stewart, May/June).

There—Entering an angler's special world helps a youngster cope with troubles in his life (Scott Waldie, May/June).

Perspectives—The Big Hole River Salmonfly Hatch and Western Tanager Show—Weather, salmonflies, trout, and songbirds make the Big Hole River a magical place for a few weeks each June (Leo Keane, May/June).

From the Field—Montana's Fishing Log Program—More than 1,000 anglers help FWP biologists collect important data (Jan Hughes, May/June).

1995 Fish Records—Fort Peck Reservoir Steals the Show—Anglers set four new records in 1995 (Dave Books, May/June).

Our Point of View—Whirling disease and illegal fish introductions are threatening the core of our wild trout fisheries (Patrick J. Graham, July/August).

River of Perpetual Hope— Through a century of change, the Madison River has given us wild trout, knowledge, and new possibilities (Tom Palmer, July/August).

High, Wide, and Speckled—For those willing to pay the price in boot leather, Montana's alpine lakes offer trout fishing in spectacular surroundings (Dave Carty, July/August).

Trout that Fly—Ever wonder how trout get established in high-mountain lakes? Most hitch a ride in an FWP helicopter (Mark Gaub and Daryl Hodges, July/August).

From the Field—Montana's Fish Health Laboratory—FWP's fish health biologist troubleshoots fish disease problems and helps hatcheries grow healthy fish (Bruce Auchly, July/August).

Catchall—Draft Warmwater Fisheries Plan Available—FWP seeks comments on management of warmwater species (Jim Satterfield, September/October).

GAME/HUNTING

Perspectives—Mama and the Bird—A busy wife and mother experiences her first spring turkey hunt (Terri Adams, March/April).

Our Point of View—FWP ponders the dimensions of sustainable mule deer hunting (Patrick J. Graham, September/October).

A Massing of Elk—An elk herd's annual fall migration from summer to winter range is sometimes two steps forward and one step back (Sam Curtis, September/October).

Setting the Season—Adaptive Harvest Management offers a better way of setting duck hunting regulations (Jeff Herbert and Fred Johnson, September/October).

The Mule Deer Dilemma— Declining mule deer populations and a shortage of bucks in some parts of the state may call for changes in seasons (William Phippen, September/October).

Montana's River Roosters— Pursuing pheasants in their brushy river-bottom haunts is not a sport for the timid (Dave Carty, September/October).

Perspectives—Goose Camp—An opening-weekend reunion turns back the clock for a group of waterfowlers each October (Greg Tollefson, September/October).

Repaying the Debt—A special mule deer hunt helps a nephew repay the uncle who mentored him in the spirit of the hunt (Tim Christie, November/December).

Perspectives—Accentuating the Positive—Hunters should take pains to understand how their activities can affect private landowners (Alan Charles, November/December).

GENERAL

Special Photo Issue (January/February).

Getting Together—Montana Fish, Wildlife & Parks and the U.S. Forest Service are working together to manage the Bob Marshall Wilderness Complex

(John Fraley and Greg Warren, March/April).

Borgreen's Canvasbacks Win '96 Stamp Contest—Jim Borgreen's rendition of a pair of canvasbacks at Freezout Lake took top honors in the 1996 state waterfowl stamp competition (William Phippen, March/April).

Catchall—Seven Montanans Inducted into Hunting Hall of Fame—Seven inductees join Montana's Hunting Hall of Fame (March/April).

Quigley Down the Yellowstone—At the Matthew Quigley Buffalo Rifle Match near Forsyth, modern marksmen test their skills with old-time guns (Dan Vichorek, May/June).

Catchall—FWP Employees Receive Accolades—Three department employees are honored for outstanding achievements (July/August).

Our Point of View—Only through caring for the land and for one another can we preserve the traditions of wildlife management in Montana (Patrick J. Graham, November/December).

Bud—After nearly eight decades as a hunter, trapper, and land manager, Bud Moore still leads by example (John Fraley, November/December).

Catchall—The FWP Commission Wins an Award (November/December).

From the Field—A Story of Possibility—A new video looks at livestock grazing and wildlife on public land (Mike Gurnett, November/December).

PARKS/DEPARTMENT LANDS

Lands Legacy—Dust to Ducks—An intricate system of dikes, ponds, and islands solved a dust problem and created a home for wildlife at the south end of Canyon Ferry Reservoir (Bernie Kuntz, March/April).

Lands Legacy—Conservation Easements: A True Partnership—These new agreements are helping FWP conserve wildlife habitat and provide public access while leaving land in traditional uses (Steve Knapp, May/June).

Lands Legacy—Fort Owen: Spirit of the Frontier—Fort Owen State Park gives visitors a glimpse of what life was like in an early Montana settlement (Dale Carlson, July/August).

Share With Care—Winners of the State Parks Poster Contest for fifth-grade students are announced (July/August).

Lands Legacy—The Elk Pasture—The Sun River Wildlife Management Area provides crucial winter range for more than 2,000 elk (Quentin Kujala, November/December).

WILDLIFE

Our Point of View—Some endangered species are well along the road to recovery, others are not (Patrick J. Graham, March/April).

Wildlife Property Rights—For many creatures, the drive to hold and defend a territory is as natural as breathing (Sam Curtis, March/April).

Watchable Wildlife—Montana's Endangered Species—Montana now has two mammals, three birds, and two fish classified as endangered (Mike Aderhold, March/April).

Take A Close Look—A new poster highlights prairie wildlife (March/April).

Watchable Wildlife—Montana's Threatened Species—Montana now has two birds, one mammal, and two plants classified as threatened under the Endangered Species Act (Mike Aderhold, May/June).

Catchall—Rocky Mountain Elk Foundation Secures Critical Bitterroot Valley Winter Range—A new conservation easement will provide winter range for 300 to 400 elk (Rocky Mountain Elk Foundation, May/June).

Watchable Wildlife—Rock Rabbit—Coping with its high-altitude home leaves the industrious pika little time for social graces (John Fraley, July/August).

Perspectives—Montana Rosie and the Three Bears—Thanks to the sensitive nose of a redbone hound, three orphaned black bear cubs get a new lease on life (Sandy Seaton, July/August).

Watchable Wildlife—Living in the Crown—The hoary marmot makes its home among high-mountain talus slopes and alpine meadows (John Vore, September/October).

Return of the Bighorns—Bighorn sheep are once again roaming the breaks and badlands of northeastern Montana (Mark G. Sullivan, November/December).

Watchable Wildlife—Watchful Butcher—The shrike has a dark side not possessed by any other songbird (Jerry Kustich, November/December).

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HUNTER EDUCATION PROGRAM SCORES A HIT

In 1990 I didn't like guns, certainly didn't like to be around guns, and absolutely DID NOT want to have a gun in my home. In 1990 if all guns were taken away from all people it would not have bothered me the least little bit.

Today I still don't like guns, but I gave a gun to my older son for his 16th birthday which he keeps in MY house. I have gone to the range to watch both of my sons target shoot. I plan on buying a gun for my younger son's 16th birthday as well. I have helped wrap meat and proudly taken pictures of the game my son has brought home.

The change from 1990 to now is the reason I am writing to you. The local Hunter Safety Program and the men involved are the very reasons for this change.

After my older son completed his Hunter Safety Program a man involved in the program took my son under his wing. Jim Young became my son's hunting mentor. This last hunting season my son, Shawn, shot a nice buck and was able to completely process the animal himself. His pride in this accomplishment is not a look a mother forgets. Jim's example, patient teaching, and guidance not only led to Shawn's successful hunting experiences, but also gave me a peace of mind and a comfort with guns and hunting I thought I would never experience.

When my younger son, Ryan, completed his Hunter Safety course I found myself more involved than just giving him a ride to the class. What I observed was men teaching some serious material about a serious subject. This was no Mickey Mouse class, thank goodness!! These men do not intend on putting firearms into the hands of unprepared children. The field and range exercises enforced this as well. Chuck Nottingham has made the commitment to be Ryan's mentor. Chuck's insistence on safety and ethical hunting makes it possible to look forward to Ryan's hunting experiences.

I would like to thank everyone involved in the Hunter Safety programs and commend them for their dedication to safety and education. Jim Young and Chuck Nottingham have my personal thanks for their involvement in the hunting partnership program. As a single parent of two boys, my appreciation is truly heartfelt.

I still don't like guns, but it might be nice to go with the boys just once. *—Sheila Juers, Havre*

WOODCHUCKS OR ROCKCHUCKS?

I greatly enjoyed your story on the hoary marmot in the September/October issue. Thanks! But I do have one question. In your third paragraph you comment that woodchucks (groundhogs) are not present in Montana.

In the 1930s and early 40s I shot a lot of what were called (by everybody) woodchucks in the irrigated hayfields all around Great Falls. I also shot rock marmots in some higher elevation fields in the Tenderfoot Creek country.

They may have all been marmots, but nobody thought they were the same. Cliff Rumford, whose family owned the Great Falls Sporting Goods and who was a good taxidermist, did not think they were the same.

Is it likely, possible, probable, or whatever, that these so-called woodchucks were a slight variation of "marmot"?*—David S. Gleason*

Thanks for your interest in my hoary marmot article.

Woodchucks, rockchucks (more correctly called yellow-bellied marmots), and hoary marmots are all "marmots," just as whitetails and mulies are both "deer." Woodchucks prefer areas of higher rainfall than most of Montana receives, gentle topography, deep, rich soils,and deciduous or open forests with large, open meadows. They are loners, seldom found in the company of their kind except for a mother with young or at mating. If you had one in hand, a sure way to tell is that woodchucks have eight teats, while the other species have 10.

The known distribution of the woodchuck extends from the East Coast to eastern North Dakota, north into Canada, through southwestern Manitoba into central Saskatchewan and across to central Alberta where it dips into southeastern British Columbia and barely touches the U.S. at about the Montana-Idaho border. The nearest known record was a single specimen taken in 1895 at Thompson Pass in Idaho on the Montana-Idaho border.

My guess is that the chucks you used to shoot near Great Falls were yellow-bellied marmots (rockchucks), unless someone had introduced woodchucks. It is not uncommon for yellow-bellied marmots to be called woodchucks. Nearly 20 years ago I worked on a ranch near Ringling, and all the folks around there called yellow-bellied marmots woodchucks.—John Vore, Wildlife Biologist

GALLERY OF DEATH?

Please spare those of us who are watchers of wildlife from more pictures of dead birds. Your September/October issue is a sickening gallery of death: pheasants, teal, wigeon, mallards, geese and one unidentifiable duck. Plus, a dead mule deer gazed at lovingly by its hunter.

I reluctantly accept the theory that hunting controls populations that would otherwise starve, but it is quite painful to see page after page of formerly lovely creatures hanging limp and twisted in the mouths of dogs!*—Marge Adkisson, Eagan, Minnesota*

While it is not our intention to offend anyone, the majority of our subscribers are hunters and anglers who enjoy articles and photos depicting these activities. Hunters (many of whom are wildlife watchers, photographers, and wildlife art collectors) take photos of their quarry not out of disrespect, but as a means of preserving cherished memories.—Editor

Contributors

In 1805, Lewis and Clark recorded their first sighting of bighorn sheep in Montana along the Missouri River near the present-day town of Culbertson. Sadly, this race of sheep, known as the Audubon bighorn, became extinct in 1916. In "Return of the Bighorns" (p. 2), **Mark G. Sullivan** describes successful efforts to reestablish Rocky Mountain bighorns in the breaks and badlands of northeastern Montana once occupied by Audubon sheep. Sullivan, who is an FWP biologist stationed in Malta, is the bighorn sheep and elk lead worker for Region 6 (Glasgow).

Sullivan

"Shrikes are the only songbirds that are truly predatory," says **Jerry Kustich**, "a fact reflected in the genus name *Lanius*, meaning 'butcher.'" In this issue's "Watchable Wildlife" segment, Kustich profiles the northern shrike, a winter visitor to Montana (the loggerhead shrike is a summer resident). To learn more about this migrant from the far north, turn to "Watchful Butcher" on page 8. Kustich, an avid angler and birdwatcher from Twin Bridges, writes a weekly bird column for the *Montana Standard*.

Kustich

Tim Christie learned an important lesson while hunting mule deer on his uncle Merle's ranch in southeastern Montana 33 years ago—a lesson he never forgot. Christie grew up, graduated from the University of Montana, and got a job in Idaho, while Merle eventually retired from ranching and moved to town. But their mutual love for mule deer and the pine forests and prairies of southeastern Montana continued undiminished. Last fall, they returned to the land Merle once owned for a nostalgic reunion—a mule deer hunt described in "Repaying the Debt" (p. 13). Christie is an outdoor photographer and writer who lives in Coeur d'Alene, Idaho.

Christie

"Its official title is the Sun River Wildlife Management Area," says **Quentin Kujala**, "but locals refer to it as 'the elk pasture.'" It is the winter home for 90% of the Sun River elk herd, a herd that summers in the Bob Marshall Wilderness along the Continental Divide. For a full description of this beautiful WMA tucked under the Rocky Mountain Front northwest of Augusta, and insights into its historical significance to wildlife management in Montana, turn to Kujala's "Lands Legacy" installment beginning on page 17. Kujala is an FWP wildlife biologist stationed in Fairfield.

Bud Moore grew up on a homestead fronting Montana's Bitterroot Mountains in the early 1900s, and spent his childhood in a "hunter-gatherer" family growing crops and harvesting deer, elk, and fish. After a brief stint as a sheepherder, he went to work for the U.S. Forest Service in 1934 as a firefighter and forest guard. In a distinguished career that spanned 30 years, he served in numerous administrative capacities in Montana, Utah, and Washington, D.C. "Today," says **John Fraley**, "Bud practices his view of ecosystem management on his tract nestled between the Mission and Swan mountain ranges near Condon." For a fascinating profile of a hunter, trapper, land manager, author, and visionary, turn to "Bud" on page 21.

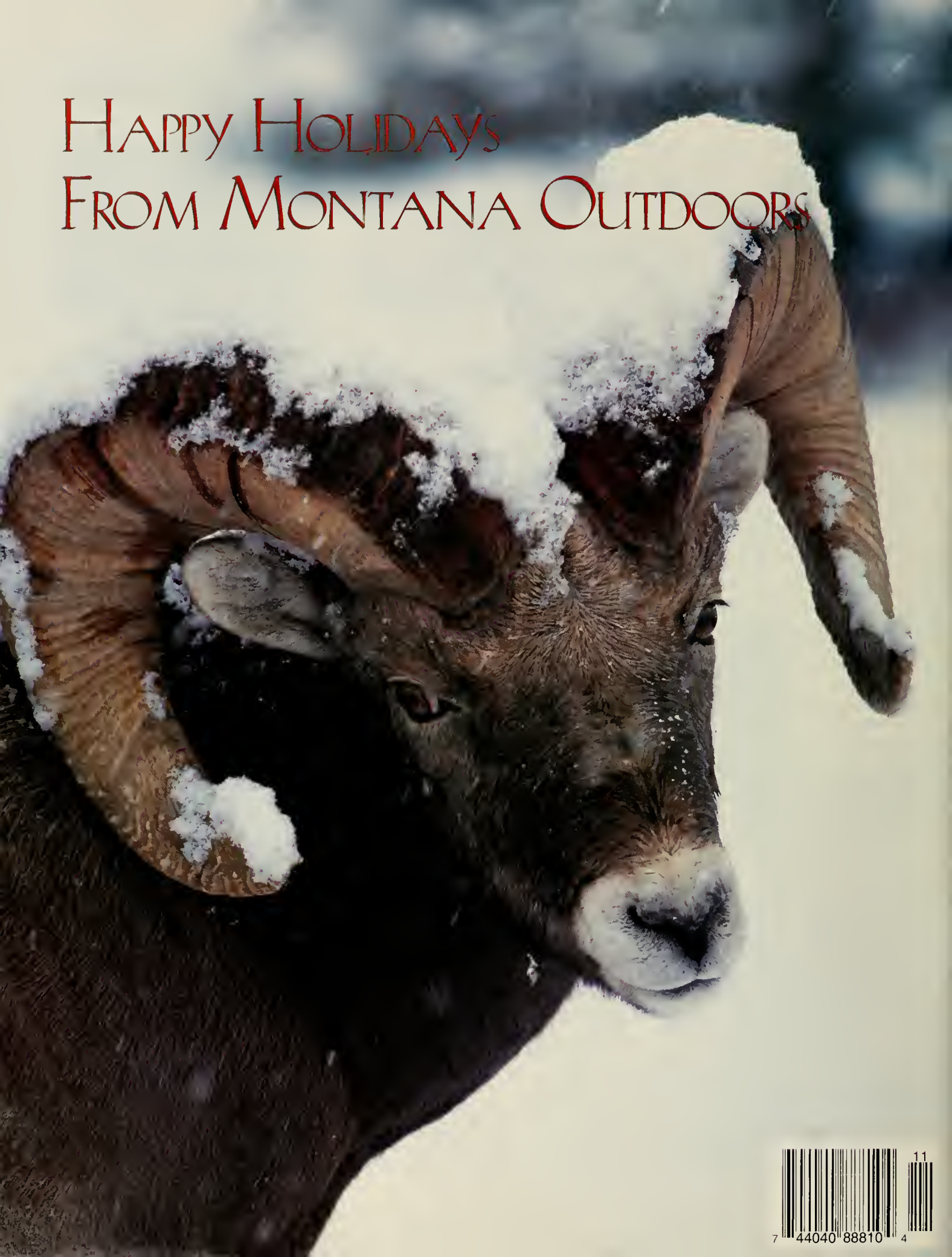
Fraley and Moore

Fraley is FWP's information officer assigned to the Region 1 (Kalispell) office.

Autumn—the time of year so eagerly anticipated by thousands of Montana hunters—is also an especially busy time for landowners. There are crops to harvest and cattle to ship—activities that might well spell success or failure for an entire year's work. In **Alan Charles'** article "Accentuating the Positive" (p. 27), he reminds us that hunters have an impact on landowners' operations, and that there are ways to minimize those impacts through courtesy, planning, and common sense. "We can turn negative impacts into the kind of positive impacts that will make private landowners welcome us onto their lands," he says. Charles, who works for Montana State University's Livestock and Range Research Station at Fort Keogh near Miles City, is chief hunter education instructor for Custer County and a member of the Private Land/Public Wildlife Advisory Council. His article is illustrated with drawings by **Clint McRae**, a Forsyth-area artist and rancher.

MO thanks the following artists and photographers for their contributions to this issue: **Mike Barlow**, Livingston; **Tim Christie**, Coeur d'Alene, ID; **Harry Engels**, Helena; **Michael H. Francis**, Billings; **Don Jones**, Troy; **Clint McRae**, Forsyth; **Bud Moore**, Condon; **Tom J. Ulrich**, West Glacier; and **Larry Zabel**, McAllister.

Thanks also to the following department employees: **Lydia Bailey** and **John Fraley**, Kalispell; **Mike Gurnett**, **Craig Jourdonnais**, and **Dan Stinson**, Helena.


HAPPY HOLIDAYS
FROM MONTANA OUTDOORS